MORPHOMETRIC MEASUREMENTS OF PACIFIC SCOMBRIDS

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Explanatory Note

The series embodies results of investigations, usually of restricted scope, intended to aid or direct management or utilization practices and as guides for administrative or legislative action. It is issued in limited quantities for the official use of Federal, State or cooperating agencies and in processed form for economy and to avoid delay in publication.

United States Department of the Interior, Douglas McKay, Secretary Fish and Wildlife Service, Albert M. Day, Director

MORPHOMETRIC MEASUREMENTS OF PACIFIC SCOMBRIDS

Ву

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Racial studies of Pacific tunes and related species by means of morphometric measurements have been conducted by the Pacific Oceanic Fishery Investigations (POFI) since its inception in 1948 Numerous data on yellowfin tuna, bigeye tuna, albacore, and shippack have been collected and racial studies are in progress. In addition, measurements of other species have been made from time to time but not in sufficient quantities for racial studies. There is a need to publish the detailed measurements as part of the studies in progress and a need to make available to other workers the detailed measurements which probably will not be used by POFI for some time to come. This paper is intended to fill these two needs

Accordingly, there are presented have the detailed measurements of 10 groups of tunas. Using the nomenclature adopted by Rosa (1950) $\frac{1}{2}$ /they are as follows:

> Yellowfin tuna, Neothumous macropteius (Temminck and Schlegel) 1842. Digeye tuna, Parathunnus sibi (Temminck and Schlegel) 1844.
> Albacore, Germo alahunga (Bonnaterre, 1756.
> Skipjack, Metsuwonus pelemis (Linnaeus) 1758.
> Bluefin tuna Thunnus thynnus (Linnaeus) 1758. Thunnus orientalis (Temminek and Schlegel) 1842, Thunnus maccoyii (Casclenau) 1872. Australian northern bluefin tuna, Aishincella tonggoi (Bleeker) 1852.

Little tunny, Euthynnus affinis (Gaator) 1850.

Dogtooth tuna, Gmnosarda nuda (Cunther) 1860 Fourtherlined mackerel, Grammatoreynus bicarinatus (Quey and Gaimard)

Frigate mackerel, Auxis thaiard (Lacepede) 1802

The tables (listed on page 6) include only measurements that have not been published previously. Additional comparable measurements of Pacific tunas will be found in other publications, e.g. Godsil (1948), Schaefer (1948), Schaefer and Walford (1950), Godsil and Greenhood (1951), and Schaefar (1952).

The data have been classified in rather arbitrary geographic units (fig. 1). The Pacific Ocean has been divided into north and south parts separated by an equatorial zone between 10° M. and 10° S. latitudes. Minor deviations from this zone were made in the western Marshall Islands area, which was extended north to 120 N. latitude to include specimens collected near Bikini, and for certain specimens from the Marquesas which were measured in a frozen condition and hence not included with optoimens collected near the Equator and measured while fresh. Meridianal lines at 1290 W. longitude and 170° W. longitude separate eastern central, and western areas. Several of the meridional lines dividing the equational area have been located on the 9-degree longitude lines in order to place in the same area all the speci mens from certain pruises along the logres lines.

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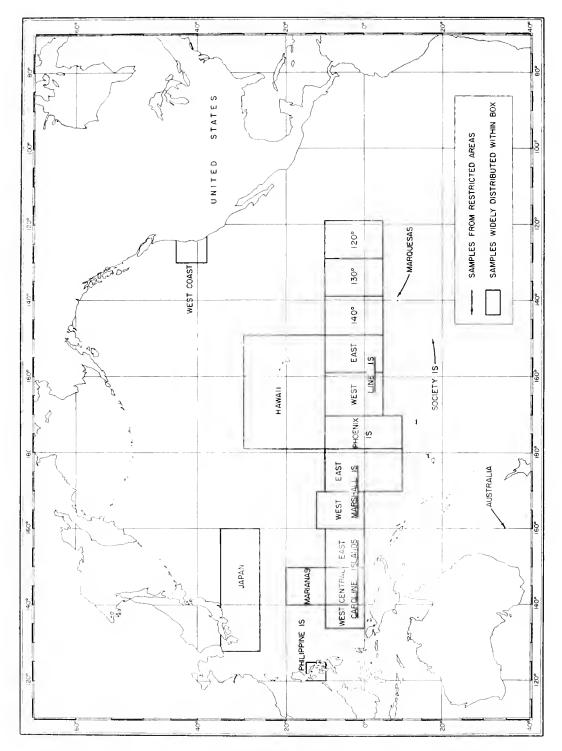


FIGURE I LOCATIONS OF ORIGIN OF TUNA MORPHOMETRIC SAMPLES

The collection of these measurements was begun by Dr. M. B. Schaefer. Dr. O. R. Smith, and H. H. Eckles, who were assigned as scientific observers on board the Oregon and Alaska. These motor vessels of the Pacific Exploration Company, under contract with the Reconstruction Finance Corporation, prospected for tunas during 1943 in the waters of the Hawaiian Islands, the Line Islands, and the Trust Territory. Since 1949, when POFI was established in Honolulu, its observers have obtained measurements from the commercial catch landed at Honolulu, from the catches of research vessels of FOII, from the catches of Japanese mothership expeditions, and from landings in Japan. Other persons who have helped include members of the Division of Fish and Game of the Israritory of Hawaii, J. C. Marr of the South facific Livestigations of the Fish and Wildlife Service, Dr. K. Kuronama of the Japanese Fisheries Agency, and Dr. D. V. Villadolid of the Philippine Bureau of Fisheries. Their permission to include the data here is gratefully acknowledged.

we also appreciate the efforts of the many individuals who have helped collect these data. Those directly responsible for the measurements are listed below. Following each name are the initials used for identification in the ensuing tables.

Donald d. Bates (DdB) Survo Mara: (SM) William I. Cabaniss (WIC) Gairh I. Murphy (GIM) Donald K. F. Ching (DC) Edwin L. Niska (ELN) Tamio Otsu (TO) Frederick C. Cleaver (FCC) Formsend Cromwell (TC) John E. Rawlings (JER) John W. Reintjes (JWR) H. H. Ecklos (HEE) Kenjî Ego (KE) Thomas J. Roseberry (TJR) William F. Royce (WFR) Milner B., Schaefer (MBS) Bell M., Shimada (BMS) Horace B. El ired (HBE) Thomas S. Hida (TSH) Isaac I. Ikehara (III) Frederick (, June (FCJ) Richard Shomura (RS) Joseph E. Hing (JEH) Osgood R. Smith (ORS) John J. Marr (JCM) Edward D Stroup (EDS) Walter M. Matsumoto (WHM) Wilvan G Van Campen (WVC) Daniel T. Yamashita (DTY) Denald L. McKernan (DLM) Kalfred L. K. Yee (KY) G. W. Mead (GWM) Harvey L. Loore (HLM) Heeny S. H. Yuen (HY) Territory of Hawaii, Division of Fish and Jane (TFG) Philippine Bureau of Fisheries (PBF) Japanese Fisheries Agency (JFA)

Grateful acknowledgments are also extended to the officers and crew members of the research vessels of the Pacific Octanic Fishery Investigations, who usually assisted in the handling of the often large and weighty specimens.

All measurements of length were recorded in millimeters; measurements of weight were recorded in pounds. The measuring techniques described by Marr and Schaefer (1945) were used by POFI observers and others who are listed by name in the preceding table. The observers for other government agencies listed are not known to us and their techniques may have differed slightly.

The different case used to catch tuna may yield quite different size groups of tuna and it seems desirable to classify the morphometric data accordingly. The abbreviations used in the tables are as follows:

Gill net Gn
Longline Ll
Pole and line rl
Pursc seine Ps
Troll Tr

The characters usually presented in the tables are those which Schaefer concluded were most useful for differentiating the stocks of tuna. Earlier papers by Schaefer (1948) and Schaefer and Walford (1950) included some characters that were difficult to measure accurately and consistently by different examiners under adverse field conditions and others that we do not consider useful for comparative purposes. With the elimination of some characters, there is the addition of a new measurement, the distance from the insertion of ventrals to the anterior edge of the vent.

The Department of Defense has approved for publication the data collected in Bikini, Western Marshalls by Mr. J. C. Marr. In addition to the characters used in this publication, he measured other characters: pectoral insertion to insertion 1st dorsal, length base 1st dorsal, length longest dorsal finlet, length longest dorsal spine, spread caudal, greatest width caudal reduncte at keels, least depth caudal reduncte, length maxillary, number of gill rakers and number of finiets. These data will be included in publications by Mr. Marr.

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																	ngallend i Pagallen
Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Sucut to Ing.	ias Ventral to	Greatest Body Depth	Longih Pe toral	Height 2nd Dorsal	Height Anai	Diameter Inte	No. Guli Rakeza	Ser	Month and Year	์ นิยอม	Бхашлет
1226 1269 1284 1327 1330		311 324 337 339 346	346 357 365 374	621 656	675 727 731 742	341 370 369 372	367 375 373	293 320 329	330 317 337	212 258 207	214	36 36 38	10/23 11/20 11/21 10/22 10/21	f m f	11/52 11/52 5/52 10/52 5/52	L1 L1	GIM GIM III TJR III
1347 1356 1361 1367 1383	112	368 351	3 69	702 697 687	776 779 756	395 381	391 403 400	351 327	330 345 384	298 320 366	371 338	42 40 39		f m f	5/52 10/52 10/52 10/52 11/52	L1 L1 L1	WVC GIM TJR GIM TJR
1388 1390 1398 1410 1416		345 365 358	411 388		775 795 786	400 402 3 96	381 422 403	337 378 361	3 ⁷ 5 348 372	376 326 276	446 36?	44 40 40	1 (,)	f m m	10/52 11/52 6/52 6/52 11/52	L1 L1 L1 L1 L1	WVC
1418 1422 1431 1435 1439	122	360 370	386 398 388	709 714 727 711 722	785 804 782	398 411 390	399 412 403	371 389 350	399 349 346 372 352	388 367 408	419 430 430	39 40	10/20 10/21 8/22 11/22 9/22	m m m	10/52 5/52 6/52 11/52 5/52	L1 L1 L1 L1 L1	WYC WYC TJR
1450 1455 1456 1460 1463	129	361 360 366	403 398 405 393 392	727 726	804 800 798	399 401 402	415 420 408	376 375 373	347 377 386	357 403	406 405 541	40	10,421 9,422 10,422	f	10/52 5/52 10/52 5/52 11/52	Ll	WYG GIM III GIM
1468 1470 1477 1491 1523	139	372 374 384	397	740 748 747	809 8 31 8 35	406 415 431	418 418	373 368 360	356 339 366	401 372 396	504 430 407 426 487	40 40 43	10/21 10/20 10/20 9/22 10/22	f	10/52 6/52 5/52 10/52 10/52	L1 L1	TJR WYC III GIM

Table 1. Yellowfin from the Eastern Equatorial Pacific: 120° West Longitude (Continued)

Total Length	Weight	Head Length	Snout to Ina. 1st Dorsal	Snout to Ins. 2nd Dursal	Snout to Ing Anal	Snout to Ins. Ventral	Ins. Ventrals to Ant. Edge Vent	Greatest Body Derth	Length Poctoral.	Height 2nd Dorsal	Height Anal	Diametor Iris	No. Gill Raller	Sex	Month and Year	Geal	Examiner
1529 1533 1537 1539 1546	143	371 402 372 389 383	411 442 430 426 433	761 777 779 774 776	847		420 414 440 446 453	351 388 377 384 384	372 380 386 347 357	410 528 382 490 555	428 585 376 544 470	41 45 39 43 43	10/21 10/21 9/21 10/20 9/21	f g m f	6/52 11/52 10/52 6/52 6/52	L1 L1 L1 L1	III
1551 1567 1572 1574 1575	177 162 142	385 399 408 394 390	431 436 400 433 430	783 782 801 797 771	879 883 862	437 449	421 453 445 445 420	367 388 405 419 377	403 394 372 411 405	466 298 644	572 505 365 718 532	49 43 41 49 41	11/21 10/20 10/21 10/22	m f m f m	6/52 10/52 11/52 10/52	L1 L1 L1 L1	III TJR
1587 1588 1599 1611 1622	148 168 171	399 392 415 402 403	428 432 439 441 433	796 788 823 792 806	864 901 867	442 466 447	447	360 402 427 403 412	346 383 372 386 384	550 528 645	503 678	43 44 45 45	8/21 9/20 10/22 11/21 10/21	f m m m m	10/52 11/52 6/52 11/52 11/52	Ll	TJR III GIM
1642 1677		411 424		821 825			451 451		390 394		622	41 45	10/21 10/22	m m	11/52 11/52	Ll	GIM GIM

Table 2. Yellowfin from Central Equatorial Pacific: 130° West Longitude

618 776 943 1245 1268		218 257 306	33 5	425 510 620	462 567 691	241 286	225 286 345	203 248 283	210 246 332	92 138 244	91 143 275	28 33 35 37 39	9/20 9/21 10/22 9/22 10/21	m f f	10/52 10/52 6/52 11/52 11/52	Tr TJR TT TSH L1 III L1 TSH L1 TSH
1275 1290 1291 1317 1354	86 94	338 331 239	374	668 658	742 719	378 360 357	382 368 367	320 323	338 351 356	324 313	325 363	38		m f f	11/52 6/52 6/52 11/52 6/52	L1 GIM L1 WVC L1 WVC L1 TSH L1 III
1363 1375 1386 1394 1403	105 109	339 357 362	380 364 382 396 384	673 700 714	751 776 780	373 393 398	387 388 390	323 342 365	354 358 358	363 292 422		40 38 43	10/21 8/22 9/21 11/21 10/20	m f m f m	11/52 11/52 11/52 6/52 6/52	Li GIM Li TSH Li GIM L2 III L1 III

Table 2. Yellowfin from the Eastern Equatorial Pacifics 130° West Longitude (Continued)

Total Length	Weight	Heal Length	Spout To Ins.	Smout to instant	Shout to Ing Anal	Spoot to Inc	Tas Ventrals t Ant Edge Vert	Greatest Bode Depth	Length Persons.	वेंचाड्रात, रागत चे व्यव	Metgh Anai	Flancier ir.s.	No SEL Rokera	**	Mon to said Year		Examiner
1421 1422 1438 1443 1448	105	345 352 357 366 366	387 398 397 395 397	710 716 728 727 725	770 794 796 796 806	391 394 399	412 410		346 367 386	341 430	381 375	40 38 39 41 39	9¥22 10¥21 10¥21 10¥21 8¥2±	m m m m	6/52 6/52 6/52 6/52 6/52	L1 L1 L1 L1 L1	III
		373 357 364 380 382	408 392 396 417 416	721 736 759	820 796 816 828 831	402 399 412	420 407 430 421 407	337 381 354	385 353 375	425 524 484		40 42 47	11/22 9/21 10/20 10/20 11/22		6/52 6/52 6/52 11/52 11/52	Ll Ll Ll Ll	III III TSH
1498 1514 1523 1526 1533		375 378 388 379 383	413 420 420 417 425	755 766	853 841	423 439 427	431 423 431 423 430	388 392 386	375 356	409 530	419	42 44	9/21 10/2 2 11/21 9/21 10/20	f m m f	6/52 6/52 6/52 6/52 6/52	L1 L1	WAC
1535 1562 1563 1578 1579	162 158		420 443 421 440 449	772 793	855 872 856 884 878	439 419 434		408	359	468 543 580	499 499 610	44 47	12/21 11/22 9/20 10/21 9/20	m f m m	6/52 6/52 6/52 11/52 11/52	Ll	TII WVC GIM
1599 1606 1617 1622 1645	190	395 398 407 414 430	435 455 435	799 802 812	881	445 445 455	445 450 462	419 428 430	377 400 384 394 415	504 499 455	540	47 45 47	10≠22 7≠20 11≠21 10≠20 9≠21	m m	6/52 6/52 6/52 6/62 11/52	Ll Ll Ll	WVC III III III GIM
1647 1652 1657 1657 1658	181 174 178	411 413 412	455 454 450	847	915 912 915	450 462 447	499 469 479	420 407 412	365 379 389	401 430 466	444 501 505	43 47 42	10/21 9/22 9/20 9/21 10/22	m m	11/52 11/52 11/52 11/52 6/52	L1 L1 L1	TJR TSH TSH TSH WVC
1697 1697	192 195	416 419	447 465	827 847	927 942	468 461	471 497	404 416	397 377	544 572	544 625	46 44	8≠21 9≠22		11/52 11/52		TSH GIM

Table 3. Yellowfin from the Central Equatorial Pacifics 140° West Longitude

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Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins, 2nd Dorsal	Spout to Ins. Anal	Snout to Ins. Ventral	Ins. Ventrals to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Hoight 2nd Dorsal	Haight Anal	Diameter Iris	No. Gill Rakars	Sex	Month end Year	Geaf	Esaniner
1210 1211 1262 1269 1325	74 91 95		342 349 357 361	618 611 637 653 669	688 684 705 738 733	356 348 353 366 366	341 362	297 296 314 324 326	331 349 352 342 348	266 249 294 233 260	292 294 358 297 315	31 42 37 37 34	9 / 20	f f m	8/52 8/52 9/52 9/52 9/52	L1 L1 L1 L1	WMM WFR WMM RS RS
1326 1335 1336 1336 1339		343 335 343 348 338	373 359 378 379 371	661 666 695 681 671	745 736 764 756 726	379 374 389 385 372	370 383	330 341 343 336 336	378 371 350	334 397 346 294 351	399 406 398 333 355	39 41 40 33 41	10/20 9/20 9/21 7/20 10/20	Î m î m	9/52 8/52 8/52 6/52 6/52	L1 L1 L1	DLM DLM DLM WMM WMM
1341 1346 1349 1350 1360	100	345	361 352 364 368 368	666 662 675 673 672	735 759 748 740 752	378 402 382 373 386		2	343 366 351 374 374	372 359 319 393 406	402 403 351 475 343	39 40 39 40 41	9/21 10/20 10/21 10/21	m f m f m	6/52 6/52 6/52 8/52 9/52	L1 L1 L1 L1 L1	WMM WMM WMM RS DLM
1362 1366 1366 1368 1371	99	337 352 342 350	369 385 380 383	673 700 699 692 690	749 769 752 771 771	373 384 373 387 384	382 389 383 393 399	336 347 337 345 344	354 345 363	367 335 290 446	440 380 450 465 473	40 38 43 40 39	10/19 9/21 9/20 10/21	f m f f	9/52 6/52 9/52 8/52 9/52	L1 L1	WMM DLM WFR DLM WMM
1372 1372 1380 1381 1383		350 350 346	379 392 372 373 368	695 682 703	767 758 771	391 389 383	388 378 403	355 336 351	365 375 364 369 360	381 365 388	434	40 40 41 39	10/21	m m m m	9/52 9/52 6/52 9/52 9/52	Ll	
1384 1392 1397 1398 1401	111	342			771 760	385 376 395	396	351 331 363	368 378	461 375 372	313 523 393 399 599	38 43 42 39 37	9/20 10/21 9/20 9/21	m f f	6/52 9/52 9/52 9/52 6/52	II II II	WMM WMM WFR DLM ELN

Table 3. Yellowfin from the Central Equatorial Pacifical 140 West Longitude (Continued)

		· · · · ·										The State of		7			CONTRACTOR OF THE PARTY OF THE
Total Length	Weight	Head Length	Snout to Ins. Ist Dorsal	Snout to Ins. 2nd Dersal	Spout to Ins. Anal	Snout to Ins. Ventrals	Ins. Ventrals to Ant. Edge Vent	Greatest Body Depth	Leagin Fe Joral	Feight 2nd Dorsal	Beight Anal	Diameter Irla	No. Gill Rakers		Month and Year	95	Examinat
1406 1412 1416 1418 1421		253 352 344 368 363	3 85 3 88	671 703 701 730	772 775 785 814 792	3 85 3 78	398 417	346 339	(439 355 428 380 332	407 481	41 40 40 42 39		í m m f	8/52 8/52 9/52 8/52 8/52	Ll Ll Ll	DLM DLM DLM DLM
1422 1423 1427 1428 1435		345 369 355 360 360	395 398 400	728 718 719	788 815 787 803 811	405	428	375 353 364	379 342 378 380 344	367 300 355 362		40 40	10/22	m m m m	9/52 8/52 9/52 9/52 6/52	L1 L1 L1	DLM WMM WMM DLM JEK
1439 1442 1442 1442 1442		355 361 364 373 375	398	731 724	801 798 801 809 825	397 404 410 410 412	414 400 405 412 423	363 374	379 358		542 483 554 322 424	41	10/21 10/20 10/17	f m m m	9/52 9/52 9/52 8/52 6/52	L1 L1 L1	DLM DLM DLM DLM WMM
1444 1448 1449 1456 1456		362 351 363 365 366	401 404	724 722 744 734	796 799 785 816 809	400 389 398 404 400	403 405 399 414 420	381 354	3 88	333 398 398 349 442	246 453 460 397 493	43 39 41 39 40	9/20 10/21 9/22 11/21 9/21	m f m f m	8/52 9/52 8/52 9/52 9/52	L1 L1 L1	DLM WMM DLM WMM WMM
1462 1462 1470 1478 1480		377 365 364	408 3 98 385	737 739 726 756	814 821 815 800 821	420 407 422 411	407 420 385 422	367 348 384	370 376 361 391	399 394 566	430 466	42 40 41	11/21 10/21 9/22 11/21 10/20	m m m m	9/52 6/52 8/52 6/52 8/52	L1 L1 L1	DLM WMM DLM WMM DLM
1481 1493 1499 1502 1503	131	373 376	409	748 753 757	824 825	419 401 433	421	382 387	352 366 360	377	616 470	42	10/20 9/19 9/21 10/21	m m m m	9/52 6/52 6/52 6/52 6/52 9/52	L1 L1 L1	WFR WMM WMM WMM

Table 3. Yellowfin from the Central Equatorial Pacific: 140° West Longitude (Continued)

Total Length	Weight	Head Length	Snout to Ins.	Sport Derest	Should be lust	Vanital Table	Trace Venturals no Anto Bryon Vent	Gareateat Didi	Length Posterial	Beight Smi Dorsel	Barght Ansi	Dismoter Inia	No. Gill Rakers	ಲ ೯ ೯	Mouth and Yoar	S. 85.0	Brandus
1503 1504 1509 1514 1517		379 391 374	428 422 409	748 750 765 749 766	835 823 856 828 825	421 411 427 414 410	428 422 442 421 414	379 360 385 383 374	393 355 371 368 350	506 370 485	548	41 50 44 42 44	9≠19 11≠20 8≠23	m f m f m	9/52 9/52 9/52 8/52 9/52	L1 L1	DLM WFR WMM DLM WFR
1522 1524 1524 1531 1533		389 380 386 380 378	423 415 412	766 761 764	838 852	420 426 424	451 426 441 423 448	390 400 396 387 396	395 378 369	474 498 549 561	527 546 507 638 656	41 41 42 43 44	11/22 10/22 10/22 8/20 9/20	f m m m	9/52 9/52 8/52 9/52 8/52	Ll Ll Ll	WMM WMM DLM WMM WMM
1537 1540 1541 1550 1558		384 377 381 387 389	414 430 410	777	838 860 845 852 858	417 418 435	425 459 445 422 449	404 397 408 393 399	373 383 360	1	617 614 593 605 687	43 41 44 43 45	9, 20	m m m m	8/52 9/52 6/52 6/52 9/52	L1 L1 L1 L1 L1	WMM JEK
1562 1566 1568 1570 1572	175	392 389 395 376	423		865 862 879 873 863	424 431 427 431 419	444 453 455	410 382 393 414 497	395 396	601 461 477 618 623	685 398 510 705 665	45 42 42 51 43	10/21 10/21 10/22 10/21	m m m	8/52 8/52 9/52 9/52 9/52 8/52	L1 L1 L1 L1 L1	DLM WMM WFR
1572 1574 1576 1577 1578	165	391 397 395 405	414	792 787 792	869 869 870 879 882	439 441 445	433 442	433 393 417	399 398 386	573 579	571 637 505	44	10/21	m m m	9/52 8/52 9/52 9/52 9/52	L1 L1	WM
1579 1580 1584 1593 1597		403 408 410 406	439	812 801 800	894	451 440 439	428 450 470	417 439 449	416 369 382 389 388	692 556	560 769 617	45 45 42 46	9/21 10/19 9/21	m m m m m	9/52 8/52 8/52 8/52 8/52 9/52	L1 L1	DLM DLM WMM DLM

Table 3. Yellowfin from the Central Equatorial Pacifics 140° West Longitude (Continued)

									decess.com.en					, 			
Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins.	Snout to Ins.	Snout to Ins. Ventral	Ins. Ventrals to Art. Edge Vent	Greatest Body Depth	Length Pertoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	бевг	Examiner
1598 1600 1602 1605 1607		396 410 393 407 402	423 431 439 445 433	789 803 807 792 803	872 896 876 880 880	441 463 441 452 444	438 441 454 445 450	404 405 43 0 410	379 386 375 372 412	539 468 524 544 542	668 515 554 597 605	44 44 43 44 43	9/18 10/20 9/20 10/21 10/23	m m m m	8/52 6/52 8/52 9/52 9/52	Ll	DLM WMM DLM WMM WMM
1610 1615 1616 1616		422 408 407 411 406	438 437 427 448	804 802 801 816 818	913 883 899 894 902	482 446 444 445 450	448 430 470 456 455	413 379 418 436 434	384 366 383 372 364	474 680 610 509 383	701 698 572 463	45 46 46 47 44	11/21 9/20 9/20 9/22 10/20	m m m m	6/52 6/52 8/52 8/52 8/52 9/52	L1 L1 L1 L1 L1	WMM JEK WMM WMM DLM
1623 1623 1629 1641 1643	170	407 409 412 404 407	429 451 455 453 450	808 828 824 813 815	905 917 906 893 905	468 454 452 452 451	450 467 473 442 471	402 412 425 400 428	400 387 393 404 401	619 372 502 654	673 586 566 519	45 44 43 47 41	9/21 10/20 10/19	m m m m m	6/52 9/52 8/52 9/52 9/52	L1 L1	WMM DLM DLM RS WMM
1647 1649 1652 1662 1670	197	411 421 415 408	451 466 450 444	812 828 825 827 836	897 928 911 910 923	453 461 462 454 463	460 482 469 466 479	420 430 425 401 439	373 392 383 394 379	488 558 410 630 532	573 595 461 517 412	43 45 41 44 52	8≠21 10≠22 10≠21 10≠22	m m m m	9/52 9/52 9/52 9/52 9/52	L1 L1 L1 L1 L1	DLM WMM DLM WMM WFR
1678 1705 1719		416 414 436	465 446 472	844 826 875	927 925 976	468 457 487	472 505	445 431 454	397 389 382	458 534 546	544 601 566	43 44 45	9/21 10/21 19/11	m m m	9 /52 8/52 8/52	Ll	DLM DLM

Table 4. Yellowfin from the Central Equatorial Pacific: Eastern Line Islands

753 17 212 231 405 446 240 211 189 224 106 102 35 17 212 232 406 450 240 218 181 225 117 128 137 128 151 217 237 420 460 238 221 203 220 121 137 137 1 151 Tr JE	774	16 17 17	212	219 231 232	384 405 406	419 446 450	222 240 240	204 211 218	175 189 181	233 224 225	110 106	115 102	32 33	10,422	m f f f	4/51 2/51 2/51 1/51 1/51	Tr Tr	JEK
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Table 4. Yellowfin from the Central Equatorial Pacific: Eastern Line Islands (Continued)

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsel	Snout to Ins. Anal	Snout to Ins. Ventral	Ins. Ventrals to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Dorsal	Height Anal	Dismeter Iris	No. Gill Rekers	00 83 83	Month and Year	Gear	Exchine France
833 844 863 897 917	24 25 26 30 33	234 233 243 251 255	277		483 493 499 522 531	251 257 268 275 281	245 232 239 254 255	211 204 212 233 238	225 238 254 246 265	132 158 135	107 139 167 141 180	36 35 39	9 / 20 10/22	f m m	1/51 1/51 2/51 9/50 9/50	Tr Tr Tr Tr	JEK JEK JER JWR JNR
927 927 936 962 975	32 33 34 34 38	264 257 257 267 264	274 270 289	484 487 494	545 533 537 543 555	280 287 286 298 293	263 254 254 262 264	217 244 230 236 240	272 271 269 279 287	151 145 186	161 170 149 213 177	33 38 36 36 38	10/20 9/21 9/21	f	9/51 9/50 9/50 9/51 9/50	L1 Tr Tr L1 Tr	JWR JWR JWR TC JWR
978 979 1016 1019 1042	31 35 46	264 267 277 282 282		496 517 524	563 581 602 591	566 303 313 343 316	273 278 288 279 287	236 236 256 254	270 275 281 281 296	159 174 169	175 214 180	33 39 35	10/21	m f f m	8/51 9/51 11/50 11/50 9/51	L1 Tr Tr L1	III III TJR FCC TC
1043 1043 1046 1046	46 46 40 48	272 283 273 277 276	297 305 297 299 297	529 540 5 3 9		312 317 309 301 304	280 292 294 284 290	246 258 243 250 257	305 303 301 294 281		272	34 35 34	11≠21 10≠21	f f f m	2/53 9/51 11/50 1/51 8/51	L1 L1 Tr Tr L1	DC III FCC JEK III
1057 1062 1068 1086	47 50		299 300 314	549 559	597	304 329	294 307 303	255 261 268	338 308 300	196 258 245 198 204	255 209	36	1	f m m f m	8/51 9/51 8/51 10/50 11/50	Li	TC ILI FCC FCC
1091 1093 1095 1130 1161	50 45 50 52 62	298 293 293 303 305	314 314 329	556 566	619 612 629		298 297 303	260 256 276	302 315		206 195 249	35 38 37		f m m	9/51 2/51 8/51 1/51 1/51	Tr Ll Tr	III JER III JEK JEK

Table 4. Yellowfin from the Central Equatorial Pacifics Eastern Line Islands (Continued)

													-				,
Total Length	Weight	Head Length	Snout to Ins. Ist Dorsal	Snout to Ins 2rd Dorsal	Snout to Ins	Shout to Ins. Ventral	Ins Ventrals to Ant. Edge Vent	Sest Bo	Lengib Postoral	Height 2nd Dorsal	Height Anal	Diameter Irla	No. Gill Rakers	S. J. S.	Month and Year	Gear.	Frantiasr
1181 1182 1183 1214 1221	73	311 309 310 306 316	332 333 345 336 344	601 594 603 609 616	663 665 654 675 681	362 345 342 336 360	312 332 313 348 321	289 273 268 302 291	328 309 323	153 210 215 255 200	261 252 242 334 207	3 9	11/21	f f m m	10/50 11/50 11/50 8/52 11/50	L1 L1 L1 L1 L1	DHB
1222 1226 1240 1245 1245	82	313 321 309 317 325	341 347 355	619 624 623 632 627	679 698 686 696 700	352 366 342 351 375	335 345 346 345 344	279 292 316 297 284	323 349 352	269 247 262 277 227	302 265 286 302 253	38		f m f m	11/50 11/50 8/52 11/50 11/50	L1 L1 L1 L1 L1	DHB DHB RS DHB DHB
1248 1275 1276 1293 1298	86 83 89 96	331 324 326 333	351	633 660 644 649 651	708 725 716 710 713	353 370 365 364 364	358	311 315 324 311 313	349	398 271 322 325 331	436 275 377 336 391	47 37 36 41	10≠20 9≠21	f m m m	8/52 8/52 8/52 11/50 2/53	L1 L1 L1 L1 L1	WFR RS RS FCC DC
1300 1317 1324 1326 1331	93 91 91 2 105			660 670 660 651 676	727 745 734 734 746	367 379 354 367 385	363 375 380 364 370	328 326 323 309 332	362 355 376 384	327 410 342 379 364	369 439 394 498 390	47 46 41 39	9/22 11/20	f m f f	8/52 11/50 8/52 2/53 8/52	L1 L1 L1 L1	WFR FCC WFR JEK RS
1339	102 100 97		376 378	679 687 679 675 672	752	383	368 374 382 374 366	336 334 336	326	340	449 313 395 363 452	38 38 48	9≠22 11 ≠ 21	m m m f m	11/50 8/52 10/50 8/52 8/52	Ll	FCC RS FCC RS WFR
1350 1352 1354 1356 1357		333 342 332 328	380 365	681 681		372 369 383 370 367	389	348 345 333	357	376 495 444	410 417 554 488 389	40 46 42 41 40		f f f m	8/52 8/52 8/52 8/52 8/52	L1 L1 L1 L1 L1	RS WFR RS RS RS

Table 4. Yellowfin from the Central Equatorial Pacifics Eastern Line Islands (Continued)

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Shout to Ins. Anal	Spout to Ins.	Ins. Ventrals to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakens	ଓଡ଼	Wonth and Year	Gear	Examiner
1359 1368 1372 1372 1374	110 95	341 342 349 335	363 378 378 378	691 681 695 712 649	758 749 766 762 722	390 379 389 385 372	379 399 380 360	337 333 342 351 333	376 366 364 361	367 519 393 303 270	461 557 442 366 315	42 42 39	10≠19 10≠21	f m m m	11/50 8/52 10/50 8/52 8/52	L1 L1 L1 L1	FCC RS FCC WFR RS
1377 1380 1380 1381 1383	114 106 112	337 352 350 342	367 381 376 385	684 689 706 687 700	743 764 773 762 765	380 372 388 387 376	364 401 386 384	343 358 354 343 350	374 346 349 358	395 380 494 396 414	463 443 549 544 488	41 46 43 44 40		f m f f m	8/52 8/52 8/52 8/52 8/52	Li Li Li Li	RS WFR RS RS RS
1385 1386 1390 1391 1393	105 113 105	348 340 348	389 381 385	703 701 707 700 709	771 757 802 772 780	382 382 390 377 378	395 379 404 400 405	348 360 329 346 330	363 371	392 459 520 337 359	466 496 577 346 325	39 40 49 43 47		f m f m	8/52 8/52 8/52 8/52 8/52	L1 L1 L1 L1 L1	RS RS WFR WFR
1394 1395 1396 1396 1396	104 109 119 122	358 338 347	366 384 387	685 695 705 732 703	775 765 776 803 766	359 378 384 410 388	384 401 410 394 384	326 345 352 354 357	366 378 362	473 365 543 314 403	623 350 610 366 45 5	43 40 50 43 42	9,421	f f m m	2/53 8/52 8/52 8/52 8/52	L1 L1 L1 L1	DC RS WFR WFR RS
1399 1405 1406 1406 1407	111	346	377	701	771 763 768 774 777	375 384 376	389	336 344 354	3 75	395 422		46 39 39	10≠20	m m m	8/52 8/52 6/52 1/51 10/50	L1 L1 Tr L1	RS JEK
1408 1409 1409 1409	116	356 349	3 78 3 78		785 777 765	396	397 394 392	348 353 351	371	373	408 515 406 415 402	40 47 41 40 40		f f m m	8/52 8/52 8/52 8/52 8/52	L1 L1 L1 L1	RS WFR RS RS RS

Table 4. Yellowfin from the Central Equatorial Pacifics Eastern Line Islands (Continued)

<u>-</u>			ŭ	3	18.	Ins.	us to Vent	Body	toral	Dorsal		77.0 	Rakers		Year		
Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins Anal	Snout to Ir	Ins, Ventrals Ant, Edge Ven	Greatest Bo Depth	Denyth Per	Height 2nd	Height Anal	Diameter I	No. Gill R	Sex	Montin and	Gear	Eranfrez
1413 1413 1416 1418 1421	114 116 112	352 362 363 362	385 393 390 390	697 713 707 721 708	777 779 778 791 784	386 388 390 414 399	389 400 387 388 398	346 358 338 354 360	367 384	417 345 617 523 571	450 380 637 643 611	39 44 45 45	10∮20 9∮20	m m f m	8/52 8/52 2/53 11/50 8/52	L1 L1 L1 L1	RS WFR FCC RS
1423 1425 1426 1428 1429	110 123	354 352 361	391 385 392	731 722 712 704 718	792 792 774 777 791	400 392 401 380 406	392 404 375 397 771	357 363 346 361 345	399	518 437 450 519 533	500 577 540 614	48 47 43 40	10 /2 0 9/19	m f f	8/52 8/52 8/52 1/53 10/50	L1 L1 L1 L1	WFR WFR RS JEK DHB
1430 1432 1434 1434 1435	115 123 122 124 121	359 363 353	380 399 382	715 715 720 741 705	775 781 803 813 778	395 404 400 407 397	402 384 407 412 387	349 374 353 357 363	368 356	423 479 412 477 429	532 556 460 488 572	50 40		m f f m	1/51 8/52 8/52 8/52 8 52	Tr L1 L1 L1 L1	JEK RS WFR WFR RS
1436 1441 1444 1446 1450	120 117 121 123 122	352 355 358 349 364	381 386 387 389 396	726 715 719 718 736	778 784 782 789 808	391 401 402 386 408	389 385 386 413 410		367 371		534 339 602 596 531	41 39 42 45 43		m f f	8/52 8/52 8/52 8/52 8/52	L1 L1	RS RS RS RS
1456 1458 1458 1459 1460	123	362 364 359	410	729 751 732 720 745	827 807 805	406 398	411 425 416 391 428	364 380 354	378 367	411	449 417 601 486 539	42 39 45 49 47	10/21	m f f	8/52 8/52 1/53 8/52 8/52	L1 L1	RS RS JEK WFR WFR
1462 1469 1474 1477 1477				726 740 737 729 753	817 805 816 844 823	398 400 453	394 411 412 419 421	356 368	381	493	689 526 531 645 559	46 42 48	9≠20 9≠21 9≠20	m m m m	11/50 8/52 1/53 11/50 8/52	L1 L1 L1	FCC WFR JEK FCC WFR

Table 4. Yellowfin from the Central Equatorial Pacific: Eastern Line Islands (Continued)

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins.	s. Ventrals to nt. Edge Vent	Greatest Body Depth	Length Pestoral	ight 2nd Dorsal	ight Anal	Diameter Iris	. Gill Rakers	54	Month and Year	T. G. D. J.	Exemine:
To	We	Не	Sn 1	Sn 2	Sn	nS N	Ins	G.	Le	Неј	Hei	Di	No.	Sex	M.	ુ	ਉ
1479 1481 1483 1485 1486	127	365 367 384 373	399 389 381 406	726 734 728 736 748	804 814 819 812 819	409 419 412 422 418	409 403 415 410 403	383 373 363 364 386	3 88	364 500 603 538 559	539 601 632 653 668	5 3	9/20 9/19 10/21	m m f m m	11/50 10/50 8/52 10/50 8/52	L1 L1 L1 L1 L1	FCC FCC WFR FCC RS
1489 1492 1497 1498 1499	140 134 127 140	3 80 36 9		751 734 751 750 725	833 816 825 824 816	420 394 406 418 399	411 424 422 427 432	385 372 363 385 375	375 350 379	428 569 564 712 504	450 653 613 752 564	43 51 49 53 45	11,≠22	m f m f	1/53 8/52 8/52 8/52 8/52	L1 L1 L1 L1 L1	JEK WFR WFR WFR RS
1500 1503 1503 1503 1507	139 136 142 146 132	380 378 378 374	402	747 741 741 764 742	826 821 815 831 821	405 426 420 431 419	412 408 402 416 413	375 375 381 383 373	376 357 347 379	537 494 596 535 514	652 581 689 611 692	49 44 47 44 43	10/21	f m m m	8/52 9/51 2/53 9/51 9/51	L1 L1 L1 L1 L1	WFR III TC III
1507 1507 1507 1510 1511	137 137 140 132 137	370 380 364 380 395	400 411 406	747 737 700	828 825 804 823 840	418	417 419 390 418 402	378 370 377 368 371	369 386 379 392 380	567	320 626 601 663 526	46 46 45 45 45	9/21	f m m m	8/52 2/53 9/51 9/51 9/51	L1 L1 L1 L1	RS JEK ELN TC
1511 1514 1515 1515 1516	142	379 380 377	397 416 401	753 750	831 839 835	417 446	433 415	387 391 373 395 383	357 370 381	543 642	547 625	45 44 45 43	10/21	m m m m	8/51 10/50 9/51 9/51	•	III FCC III TC III
1517 1520 1520 1522 1523	139	374 388	399 424	745 767 750	•	413 434	437 422 410 435 430	376 396		551	643 485 646	48 45 44 42 52		m m m m	9/51 9/51 8/52 9/51 8/52	L1 L1 L1 L1 L1	TC III RS TC WFR

Table 4. Yellowfin from the Central Equatorial Pacific: Eastern Line Islands (Continued)

								unglished refer to the							,		
Total Length	Weight	Head Length	Shout to Ins.	Snout to Ins.	Snout to Ins Anal	Spout to Ins. Ventral	Ins. Ventrals to Ant. Edge Vent	Greatest Body Depth	Length Pertural	Height 2nd Dorsai	Hought Anal	Dagmeter 1713	No. Gill Rakere	73 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8	Wonth and Year	Севг	Екапірек
1523 1525 1530 1530 1531	147 145 156 127	379 374 389 386	406 419 412 396	747 749 769 759 740	822 840 832 849 849	413 442 428 452 466	424 419 420 423 405	393 378 374 385 350	400	569 594 539 608 481	612 657 600 599 574	51 43 46 45		m m m f	8/52 9/51 11/50 9/51 9/51	Ll Ll Ll Ll	WFR III DHB III III
1531 1534 1534 1535 1536	144 147 159 148 136	371 377 375 378	402 415 415 412	741 752 789 760 762	825 835 860 834 836	412 422 428 426 426	439 420 435 429 426	377 372 401 381 376	379	398 638 408 568 526	603 727 492 664 548	46 47 47 46 45		m f m m m	9/51 9/51 8/52 9/51 9/51	L1 L1 L1 L1 L1	III III WFR TC TC
1537 1538 1541 1542 1544	143 151 150		405 412 395 410	761 771 756 754 781	845 848 859 837 856		430 415 415 428 441	379 389 391 378 394	389 376 375 398	612 583 643 641 614	608 681 690 710 592	45 44 45 44 51		m m m m	9/51 8/52 9/51 9/51 8/52	Ll Ll Ll Ll	TC RS TC III WFR
1546 1546 1546 1550 1554	146 158 160 153	391 380 381 400 379	408 412 417 428 414	748 763 769 782 757	855 830 837 868 844	423 424 452 423	420 418 424 440 439	375 400 388 383	361 398 395 394	546 550 625 606 637	632 625 783 677 713	44 45 45 44	10/21	m m m m	11/50 9/51 2/53 9/51 9/51	L1 L1 L1 L1	DHB III JEK III III
1555 1561 1561 1563 1568	155 155 158	381 384 386 382	410 432 436 425	761 763	840 852 861 846	430 431 422	428 439 458	394 395	389 358	695	625 754 602 536 612	45 47 43 43 44		m m m m	9/51 9/51 8/52 9/51 8/52	L1 L1 L1 L1	TC RS TC RS
1572 1580 1580 1582 1587		401	432 439 429	791 812 798 785 778	870 869	452 440 428 456 452	441 460 444 438 434	405 386 419		570 451 581 656 553	360 576 589	42 50 51 52 45		m m f m m	9/51 8/52 8/52 2/51 9/51	Ll Tr Ll	TC WFR WFR JER TC

Table 4. Yellowfin from the Central Equatorial Pacifics Eastern Line Islands (Continued)

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins. Ventral	Ins. Ventrals to Ant. Edge Vent	Greatest Body Depth	Length Pestoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	Gear	Exeminer
1594 1597 1602 1602 1607	155 170 160 165 179	387 398 404 406	411 426 428 439	792 776 789	880 875 875 884 880	463 450 457 449 444	441 449 433 469 446	377 415 392 405 406	344 402 381 394	562 581 526 573 631	605 633 683 626 539	44 44 50 44 51		m m m m	9/51 9/51 8/51 9/51 8/52	L1 L1 L1 L1 L1	III TC III EDS WFR
1611 1614 1617 1619 1627		393 400 4 29		775 804 822 817 812	838 903 893 901 885	457 467 447 478 439	439 450 454 441 455	408 403 427 409	380 416 380	638 677 595 433 658	728 766 670 530	46 41 42 53	10,421	m m m m	9/51 11/50 8/52 9/51 8/52	Ll	III FCC WFR TC WFR
1637 1651		420 417	460 470			483 477				440 511	539 602	45 45		m m	8/51 8/52	Ll	III RS

Table 5. Yellowfin from the Central Equatorial Pacific: Western Line Islands

476 552 565 579 586	5	132 162 163 171 177	149 176 180 186 188	256 309 309 317 321	287 335 341 344 353	181 182 191	155 157 167	124 141 133 157 152	142 163 179 173 177	56 63 74 69	56 61 71 79 75	22 27 29 22 29	10≠19 9≠20	m f m	2/48 9/50 1/53 11/50	Tr Tr Pl Tr	MBS JER DC HY TJR
599 605 607 609 610	9 <u>1</u>	179 176 173 174 180	179 189 187 189 190	332 331	360 363 361	203	170 176 167	152 148 150 150	177 170 174 171 179	79 74 69 74 74	76 71 73 74	29	10/21 10/20 10/21 11/22 10/21	f m f m	1/53 11/50 11/50 6/51 2/50	Tr Tr Tr Tr	DC JWR FCJ JWR
629 630 632 633 647	11	182 187 190 187 191	196 201 200 199 206	345 344	382 380	207 206	182 183 181	164 156 167 161 167	196 181 191 185 202	76 90 73 91	81 88 77 89	34 30 29 30 34	9/21 9/20	f f m	1/53 11/50 1/53 11/50 2/51	Pl Tr Pl Tr Tr	HY JWR HY TJR JER

Table 5 Yellowfin from the Central Equatorial Pacifics Western Line Islands (Continued)

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Total Length	Weight	Head Longth	Shout to In . 1st Dorsal	Spout to Una	Smon to Ins.	Spect to Ins.	Ins. Ventrals or Art. Edge Vent	200	पुरस्कार अंद्री अन्य अन्य	Ergit die Ones	Beigh Ang.		Po, Gell Bore		Erect and Year	Geai.	
648 655 656 660 670	14	194 189 195	199 205 200			206 216 210 213 226	189 189	169 168 170	181 200 206 206	82 86 96 91 99	77 87 93 82 104	30 32 29 32 32	10/21 0/21 10/21 9/20	m f m m	2/53 1/53 1/53 1/53 2/53	Pl Tr Pl Tr Ll	JEK DC DC DC
677 683 687 713 724	13 16	200 200 204	222 216	368 374 373 381 385	403 414 406 423 424	223 223 225 226 229	193 191 202	172 183	196 203 202	86 95 102 104 112	88 84 109 101 105	32 30 30 33 34	10/21 9/21 11/22 9/21	m f f f	11/50 2/53 11/50 2/51 9/50	Tr Pl Tr Tr	T JR JEK JER JER
726 727 733 737 737	14½ 20 17 13½ 15	207 201	223 224	387 391 383 392 391	422 436 417 427 424	229 221 232 223	201 202	173 180	227 224 216 218 228	105 108 109 97 119		34 33 33 33 34	10/21 10/21	ffff	2/51 2/48 9/50 2/51 2/51	Tr Tr Tr Tr	JER MBS JER JER JER
742 747 749 749 749	15½ 15	211		407 403	445 444 440	229 236 227 238 232	217 207	193	215 230 212 223 221	97 122 100 101 114	112 21 98 116 106	33 31 33 32 35	8≠20 9≠21 ∋≠21	f m f	2/51 2/48 2/53 11/50 2/51		JER MBS JEK I JR JER
758 759 759 761 772	18	213 214 216	228 235 236	400 409 409	442 454 452	237 251 247		188 190 187	231 205 217	117 107 103	125 109 107	31 31 33	11/21 9/20 9/20 10/21	m m f m f	10/50 11/50 2/48 2/48 11/50	Τr	TJR TJR MBS MBS JWR
772 775 776 778 793	20	220 215 216	235 226 233	411 410	456 450 455	242 240 249	213 218 219 224 216	192 186 193	224 241 226	104	115	31	10/21 10/21 10/21 9/21 11/21	m f m m	9/50 11/50 11/50 11/50 11/50	Tr Tr Tr	JER TJR FCC TJR TJR

Table 5. Yellowfin from the Central Equatorial Pacific: Western Line Islands (Continued)

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Total Length	Weicht	Head Length	Snowt to Isa lat Doresl	prove to Irs. 2nd Dote:	From to Iva. Amai	Sno f to Irs Vertical	Ins. Ventuelr ic Ass. Eder Vent	Greatest Buch Dopon	Leafin Findoral	Reight See Dersell	Heigal word	Dickeror Inc	No Gill haters	Sex	Month and Year	Gear	Examine:
802 808 808 812 812	19½ 19½ 23	223 221 229 226 236	234 238 248	422 428 427 431 425	467 464 469 471 469	246 252 263 252 261	226 225 220 223 212	199 192 201 120 199	234	123	124 137 130 107 122	37 33 31 35 35	9/20 10/21 10/22	m f m f	2/51 11/50 11/50 2/51 9/50	Tr Tr Tr Tr	JER TJR TJR JER JER
813 815 821 827 830	21	229 232 233 224 229	250 251	423 433	477 475 480 471 478	256 262 259 247 261	239 229 235 231 228	192	225	132	112 129 130 159 165	31 30 33 34 32	9/20 10/22 9/21 10/21	m f f m	11/50 11/50 10/50 2/51 11/50	Tr Tr Tr Tr	T JR JWR JER T JR
832 839 846 847 852	22 22 ½	228 240 230 238 241	253 250 262	437 435 440 445 446	486	245 270 253 268 274	247 236 242 239 233	194 200 209 196 209	235 253 253		150 143 152 137 137	35 34	10/22 10/21 11/20	f m f m	2/51 8/50 2/51 8/50 11/50	Tr Pl Tr Pl Tr	JEK KY JER KY T JR
856 859 868 871 872	23	242 235 238 239 242	250	449 453 450 447 454	495 450 498 500 503	269 275 269 273 272	229 235 245 238 247	218	270 256 238	142 144 160	158 166 145 155 136	32	9/20 10/21 11/21 10/22	f f m f	2/51 9/50 8/50 11/50	Tr Pl Tr Tr	JER JER KY JWR TJR
873 874 879 881 882	24	255 245 243	258 267 264	463 467 453	507 506 507 504 505	286 277	234 247 236	222 211 209	253 260 265	155 137	176 148 160	38 34	10/22 8/20 10/21 10/21	f m m	2/53 11/50 2/53 11/50 2/51	Pl Tr Pl Tr	JEK T JR JEK JWR JER
891 893 898 908 909	27년 27년	244 252 257	273 271 266	471 475 480		273279271	255 243 246	233 222 225	248 259	141 161 196	146 159	37 34 36 38 36	9/20	f f m f	2/51 8/50 2/51 2/51 2/51	Tr Pl Tr Tr	JER KY JER JER JER

Table 5. Yellowfin from the Central Equatorial Pacifics Western Line Islands (Continued)

												-					фистопи
Total Length	Weight	Head Length	Spoys to Ins.	Spont to In- 2nd Dorsal	Spout to Isa Anal	Shout to Ins.	Ins. Ventials is Ant. Else Ven	57	Lengto Ferteral	Helght 205 Driss	Height Anal	Diameter Iris	No. Gill Rake te	S., ?	Mobble and Year	G еат	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
912 919 924 930 934	32	260 251 249 254 250	276 274 276	472 470 484 480 469	536 524 530 536 529		ĺ	230 223 228 229	247	169 157 147 154 186	159 162 145 164 193	38 34 34		m f f	10/50 9/50 9/50 11/50 9/50	Tr Tr Tr Tr	JWR JER JER JER
943 949 959 961 967		259 256 274 265 255	273 290 284	490 492 506 501 489	543 542 557 558 541	295 290 290 300 283	269 269	221 244 239	277 279	156 165 187	174 199 177 224 219		9/21 11/22 10/21 10/20 10/20	m	8/50 10/50 11/50 11/50 11/50	Pl Tr Tr Tr	KY JWR T JR T JR JWR
975 97 5 978 98 5 988	35 33 36	268 267 275 269	283 276	503 504 501 509 519	564 549 553 567 571	297 289 291 306 299	274 267 270 276 280	242 235 244	259 275	189	172 181 209 204 182	34 37 36 38	10≠21 9≠20	m f f m	11/50 2/51 2/51 11/50 2/51	Tr	T JR JEK JER T JR JER
989 989 990 991 992	35	265 275 278 264 271	273 296	507 503 518 521 551	566 573 576 553 568	301 311 299 295 304		234 246 253	260 269 274	179 151	243 175 161 207 208	33 34 34 33 35	11/23 10/20 11/21 11/21	m f m f	11/50 11/50 11/50 2/51 11/50	Tr Tr Tr	TJR TJR TJR JER JER JWR
998 1001 1006 1009 1009		270 265 266 277 284	292 296 305	522	573 573 581	301 295 306	286 284 278	244 245 247	302 279	197 174 180	219 227 194 187 193	3 5 35	10≠22 8≠21 10≠21 10≠21	m m f	11/50 11/50 9/50 11/50 11/50	Tr Tr Ll	TJR TJR JER FCC TJR
1025 1027 1028 1034 1042	40 39 43	273 286 279 282 282	331 300 302	531 529 527	595 583 584	310	280 287	237 250	319 280 300 307 290	170	260 180 231 173 236	39	9≠20 10≠21 11≠21 11≠21	m m m m	8/50 11/50 2/48 2/53 11/50	Tr Tr Ll Ll	KY JWR MBS DC FCC

Table 5. Yellowfin from the Central Equatorial Pacific: Western Line Islands (Continued)

Total Length	Waleh	H.c. Landth	Steam for I	- Fr. 14 I. 13	worth a True engl	T 18 1 2 1 1 1	ant See V		is wash higher	Head Ding Ding	Height Anal	Diam ter Iris	No. Gill Rakers	X00	Month and Year	Geal	Бхеллег '
1043 1051 1055 1066 1071		279 277 279 290 284	304 297 299 316 303	538 525 533 549 535	591 587 592 601 592	306 304 311 321 307	294 287 293 291 298	254 246 254 260 249	303 299 306	209 230 199 306	218 249 214 337 201	35 41 34 40 38	11/21 12/20 11/20	f m f m	9/50 9/50 11/50 11/50 2/53	Tr Tr Tr Pl	JER JER TJR TJR JEK
1071 1080 1087 1095 1099	48 48 47	293 293 283 295 307	315 314 312 324 324	552 543 557 567 574	602 603 617 627 637	324 317 336 347	292 292 293	277 254 262 265 276	310 326	23? 205 248 247 235	300 235 266 262 250	45 38 37 37 40	10/21 8/21 9/20 9/21	m m m f m	2/51 11 /50 2/48 2/48 1/53	Tr Tr	JER TJR MBS MBS DC
1101 1102 1103 1106 1114	49 50	288 279 300 295 300	324 306 311 325 316		592	327 317 343 336 336	306 289 301 318 310	276 240 261 268 273	279 329	205		37 35 38 46 37	11/21 10/20 8/20 11/21	f f f m	2/51 11/50 11/50 8/50 11/50		JER TJR TJR KY TJR
1117 1118 1126 1136 1137	51 55	295 294 300 310 306	315 330 324 328 335	568 569 576	622 629 637 634 657	330 326 339 348 338	306 309 310 306	264 276 273 276 280	311 303 315	253 225 234 224 298		37 39 36 38 43	9/20 10/20 10/22 10/21	m f m f	11/50 2/51 11/50 11/50 2/48	Tr Tr Tr Tr	TJR JER TJR TJR MBS
1141 1146 1151 1170 1171	60 50	299 297	327 321	588 583 592	650 630	331 339	317 309 326	273	337 325 317	257 218 251	279 274	38 41 40	10/20	m m m f m	11/50 2/51 2/51 11/50 11/50	Tr	T JR JER JER FCC DHB
1191 1195 1200 1202 1207	65	301 312	319 343 326	591 599 592	€61	350 341 343 343 343	341 331 345	276	313 340		258 268 304 261	43 36	9/21 10/22 10/20	f f f m	1/53 11/50 11/50 11/50 11/50	L1 Tr L1 L1	DC FCC FCC

Table 5. Yellowfin from the Central Equatorial Pacific: Western Line Islands (Continued)

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Total Length	Weight	Head Length	Shout to Ins.	Shout to Ins.	Shout to Ins.	Shout to In Ventral	Ins Ventrals to Ant. Edge Vent	Greatest Body Depuk	Length P. total	Height 2nd Dorsal	Height Anal	Diameter Irrs	No. Gill Rakers	Sex	Morth, and Year	Севі	E.e.a.1338.
1215 1231 1248 1262 1272		319 314 318 330 326	335 331 339 349 343	613 613 631 633 626	688 683 697 696 703	368 358 376 368 365	341 340 336 351 350	300 291 307 319 295	338	320 250 331 353 343	299 265 384 42 5 354	43	10,420	f m m f m	11/50 11/50 11/50 11/50 11/50	L1 L1 L1 Tr	DHB FCC FCC TJR DHB
1275 1294 1295 1300 1302	85 94	315 333 337 329 323	357 380 353	638 638 670 650 653	719 716 734 720 714	374 364 377 374 363	356 360 380 356	303 323 329 320 311	363	285 307 460 334 374	217 337 531 368 418	41 45 38	10/20 10/22 9/19	f m f m f	11/50 11/50 2/48 1/53 11/50	L1 Tr	FCC TJR MBS DHB
1303 1311 1313 1315 1316	96 95 84	333 339 332 346 326	362 362 365	646 668 666 664 651	719 742 735 748 718	379	360 374 362 376 362	314 318 320 341 323	345 355 346	419 326 319 364 319	449 346 498 390 375	40 40 42 43	8/21 10/22 10/21 9/20	m m m m	11/50 11/50 1/53 9/50 2/51	Tr Ll Ll Tr Tr	JWR FCC DC JER JER
1318 1327 1330 1332 1335	95 85 102	346 341 350 334 330	379 372 366 364 363	680 676 670 672 667	742 751 760 736 750	371 391 386 378 380	394 377 347 369 370	345 305	349 365	294 293 530 307 339	466 363 421 404	43 45 41	10,420 9,421 9,420	m f f f m	1/53 11/50 1/53 11/50 1/53	L1 L1 L1 L1	DC FCC FCC DC
1342 1350 1353 1354 1357	140	333 342 343 374 342	371 395	691 679 760	747 750 748 835 745	388 413	373 424	333 323 364	375 348 353 362 368	440 396 465	470		10≠22 11≠22	f f f m	11/50 1/53 11/50 1/53 11/50	Lì	DC FCC
1362 1374 1375 1387 1395	107	353 348 347 350 348	375 372 389	675 689 686 701 705	762 757 773	392 396	378 372	337 347 351	348 358	424 445	406 452 420 482 468	41	9 / 21	f m m m	11/50 11/50 11/50 11/50 2/53	L1 L1	DHB FCC FCC FCC

Table 5. Yellowfin from the Central Equatorial Pacific: Western Line Islands (Continued)

Total Length	Weight	Head Length	Spout to Ins. Ist Dorsel	1.50	Snout to Ire.	Sport to Ins.	Ins, Venueste to	Greatheat Bodt Deprin	Long H. Portonal	Height 2nd Dorsel	Height Anal	Diameter Iris	No. Gill Rahers	Sex	Month and Year	Gear	Exenliner
1403 1410 1414 1426 1431		353 374 355 366 355	389 397 395 337 372	704 706 709 717 712	782 789 791 799 787	395 433 403 413 412	399 378 409 412 390	361 369 371 355 353	364 356 373 360 367	423 418 559 445 416	463 521 645 495 456	43	10/22	m m m m	11/50 11/50 11/50 11/50 11/50	L1 Tr L1 L1	FCC TJR FCC DHB FCC
1435 1440 1440 1451 1458	134 130	367 364 365 367 372	394 393 379 384 399	722 712 71 1 725	804 800 795 794 803	430 414 415 419 410	411 396 401 394 405	366 371 360 360 359	378 390 364 378 391	520 469 512 562 587	582 564 638 691	44	10/21 9/19	f m m m	1/53 11/50 11/50 11/50 1/53	L1 L1 L1 L1	DC FCC DHB FCC DC
1463 1463 1465 1472 1474	140	358 368 379 370 383	389 399 396 401	724 728 731 718 739	798 806 799 806 815	410 414 429 420 426	397 418 400 398 411	349 365 400 360 391	362 370 377 384 370	553 563 525 558 506	587 588 519 685 535	43	8 / 20	f m m m	11/50 11/50 4/51 11/50 11/50	L1 L1 Tr L1	FCC DHB JWR FCC FCC
1477 1497 1505 1505 1519	140 151	378 386 375 373 370	390 404 396 414 402	734 749 733 766 746	825 836 818 843 821	431 432 435 421 420	422 409 403 433 412	364 380 362 369 380	380 378 363 382 373	663 670 562 450 541	741 666 662 556 549	43 46 46	9/21 10/20 10/20	f m m m	11/50 1/53 11/50 1/53 1/53	L1 Tr L1 L1	DHB DC FCC DC
1522 1522 1571 1584 1617	139 150 165 172	383 396 399 391 399	384 422 432 430 439	741 776 787 782 797	834 883 868 862 886	434 433 449 439 448	419 421 440 436 447	370 392 402 410 403	399 388 404 395 390	432 469 504 599 577	469 600 611 688	43 44 46 46 46	10/21 11/20 10/21 9/20	m m m m	1/53 1/53 1/53 5/51 1/53	Ll Ll Ll Pl Ll	DC DC DC WIC DC

Table 6. Yellowfin from the Central Equatorial Pacific: Phoenix Islands

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Total Length	Weight	Head Length	Shout to Ins. Ist Dorsal	Spout to Ins. 2nd Dorsal	Snout to In. , Anal	Snout to Ins.	Ins. Ventrals to Act. Edge Vent	Greatest Baly Dapit	Aragh Pecto at	Actgit and Dorsal	Berght Anai	Olage Grand Iras	No. Gill Bakers	(A)	Mosts and Year	Qen:	EXAMIN.
530 556 573 595 601	6 64 72 9	157	175 176 192 190	302 342 325	333 348	176 194	159 172	135 137 147 151 153	147 155 165 192 185	61 65 66 82 87	56 62 63 83 84	26 26 27 30 30	9421 10421 10421 9421	m f	2/50 2/50 1/51 8/50 8/50	Tr Tr Tr Pl Pl	MBS MBS JER KY KY
610 615 627 641 642	9	178 193 182 180 186	193 196 205 202	325 360 334 343 347	357 374		171 181 187		186 189 203 191 197	84 83 97 96 93	84 86 96 95 89	31 29 30 28 30	10/21 10/20 10/22 9/22 11/21		8/50 8/50 8/50 8/50 8/50	Pl Pl Pl Pl Pl	KY KY KY KY
644 646 648 648 652	14	185 188 187 188 186	200 205 200 196 198	352 356 346 351 351		209 207 216 212 203	182 179	162 167 167 162 161	195 195 201 202 199	101 89 97 89 92	94 81 91 86 93	33 29 32 32 33	9≠21 8≠20	f f f	1/51 11/52 1/51 1/51 8/50	Tr Ll Tr Tr Tr	JER TO JER ELN JER
653 656 662 664 667	12 12 12 12	184 187 193 184 188	202 205 210 203 199	356 349 356 358 351	386 396	203 216 215 208 219		166 162 173 165 169	194 191 203 199 198	83 95 99	84 92 97 94 90	30 29 32 30 33	9/20 10/21 10/21	f f f f	8/50 8/50 1/51 8/50 1/51	Tr Pl Tr Tr	JER KY ELN KY JER
679 680 713 716 728	12 16 16	199 206	209	364 378 382	414	219 223 229	183 184 191 196 206	173 179	208 221 224	103	104 113 121	31 34 31 35 32	11,≠22 9,≠22		2/51 1/51 8/50 8/50 8/50	Tr Tr Tr Tr Tr	JER JER JER JER
728 743 753 753 755	17 16 18	206 205 221	228 231 240	403	439 426 436	232 217 230	209	183	226 229	120 111 115	118 115 109		11/20 10/22 9/21	m m f m	2/51 2/51 2/50 8/50 8/50	Tr Tr Tr Tr	JER JER JER JER

Table 6. Yellowfin from the Central Equatorial Pacifics Phoenix Islands (Continued)

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Total Length	Weight	Head Length	Spout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins. Ventral	Ins. Ventrals to Ant. Edge Vent	Greatest Body Depth	Length Pertoral	Height 2nd Dorsal	Height Anal	Dismeter Iris	No. Gill Rakers	Sox	Month and Year	Gear	Examiner
756 768 776 778 779	18 15 19 16 18	217 216	240 241 238 240 236	407 407 418 409 412	444 448 460 447 438	239 244 248 240 234	213 216 219 222 215	184	236 219 250		116 124 111 162 135	33 34 31 33 33	9/20 9/21 11/22	f f m	1/51 8/50 2/51 8/50 2/50	Tr Tr Tr Fl Tr	JER KY JER KY
791 800 815 823 829	18 22 21 23 24	219 243	231 239 258	403 426 424 453 439	451 493 472 495 471	239 281 247 266 248	209 217 230 234 233	189 209 202 210 206	255 249 259	139 132	130 140 140 198 139	32 33 33 38 36	10/21 8/20 9/20 10/21	m m f f	2/50 8/50 1/51 8/50 8/50	Tr Tr Tr Tr	WIC JER JER JER
834 844 845 854 861	24 25 25 21 26	241 229 237	249 254 249 264 257	442 444 438 454 456	483 483 485 493 498	257 259 266 274	239	199 200 207 197 212	274 259 260	159 145 142 199	159 188 150 141 190	37 41 37 36 36	11/21 11/19 8/19 9/21 9/20	f m m f m	8/50 8/50 8/50 8/50 8/50	Tr Tr Tr Tr	JER JER JER KY
864 867 867 879 880	2년 22 27 28 28	244 243		455 455 456 459 460	486 496 504 498 502	264 275 266 261 260	230 241 239 241 247	212	249 252 266	158 139 146 155 155	179 147 155 164 168	37 37 36 36 36	9/22 9/21 9/20 9/19	f f m f	1/51 8/50 8/50 8/50 8/50	Tr Tr Tr Tr	JER KY JER JER
881 889 901 903 904		242 245 242	265 269	471 479		270 269		221 223 226	281 253 264 282 279	147 165 193	171	39 37	10/19 12/22 10/20 9/21 9/20	m f m	8/50 8/50 8/50 6/51 8/50	Tr Tr Tr Pl Tr	JER JER WMM KY
905 918 922 926 927	32 34	252	281 272 274	470 479	523 531 514 529 534	283 276	247 256	232 234 225	265 290 283	160 200 175		34 37	10/22 10/20 10/21 10/22 7/20	f f m f m	6/51 6/51 8/50 6/51 7/50	Pl Pl Pl Tr	FCJ WMM JER FCJ WIC

Table 6. Yellowfin from the Central Equatorial Pacifics Phoenix Islands (Continued)

														-			u u
Total Length	Weight	Head Length	Shout to Ins.	Snout to In	Shout to Inc.	Shout to Ins.	Ins. Ventrals &	Greatest Body Depti	Length Pentural	Height 2nd Dorsal	Height Anal	Diameter Inga	No. 6:11 Release	Sex	Month and Year	Jean.	Prem
930 939 941 943 945	32 30 30 30 34 32		286 276 282	497 492 485 489 487	548 540 538 531 533	296 292 283 276 271	261 254 259 258 262		283 268 279	156 168 182 196 192	177 218 196 225 225	39 39 35 40 39	10/19 9/20	f f f	1/51 1/51 8/50 8/50	Tr Tr Tr Tr	JER JER JER JER
949 951 961 969 973	36 32½ 36 38 38	254	279 271 276 283 282	497 492 494 499 499	562 539 532 549 544	321 286 279 295 286	251 255 262 272 263		297	210 146 169 176 214	263 190 205 187 254	39 39 39 40 38	9/20 10/21 9/21 9/20	m m m	8/50 1/51 8/50 8/50 8/50	Tr Tr Tr Tr	JER JER JER JER JER
975 1009 1009 1031 1044	3년 37 44 40	261 267 261 280 284	287 287 289 296 316	502 510 510 531 538	500 563 559 589 585	296 295 289 319 310	259 272 278 285 294	242 247	293 289 307 297 310	205 237 213 182 205	225 309 237 203 255	40 41 40 37 37	9≠20 11≠21 9≠21	f m f m	1/51 1/51 8/50 6/51 8/50	Tr Tr Tr Tr Pl	ELN JER JER FGJ KY
1049 1049 1058 1069 1089	43 40 50	279 278 277 282 296		526 530 533 532 561	583 591 592 594 622	310 317 323 323 323 339	293 282 285 295 301	254	307 345 300	220 198 229 232 206	227 220 261 226 284	35 36 34 42	9≠19 10≠22 10≠21	f m m f	7/50 2/51 6/51 8/50 2/51	Tr Tr Tr Tr	KY JER FGJ KY JER
1094 1105 1106 1108 1109	52 49	306	311 320 316	563 559	631 611 635 615 620	325 338 326	293 330	279 284 256	310 323 310 306 332	252 258 235	260 258	35 41 47 39 40	9≠20 10≠20 10≠21	m m f f	6/51 1/51 8/50 2/50 6/51		FCJ ELN KY JWR FCJ
1122 1132 1145 1149 1155		286 291 292 288 300	324 318 326	572 570 584	628 624 633 638 639	334 331 329	304 313 325	279 278 280	362 333 339 328 345	262 248 273		36 37 35	10/20 11/21 11/20 9/20 10/20	m.	6/51 6/51 6/51 6/51 2/50	Pl Pl Pl P. Tr	FCJ FCJ FCJ FCJ JWR

Table 6. Yellowfin from the Central Equatorial Pacific: Phoenix Islands (Continued)

Total Length	Weight	Head Length	Spout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins. Ventual	Ins. Ventrals to Ant. Edge Vent	Greutest Body Donth	Isngth Pectoral	Height 2nd Dersal	Height Aral	Diameter Inte	No. Gill Rekers	xas	Month and Year	Сеяг	Examiret
1170 1172 1175 1193 1197	70	305 295 304 312 317	326 331 348	586 595 614	655 644 647 670	351 330 347 353 347	316 325 330 331	298 289 272 324 304	333 342 330	301 249 314 298 258	366 264 335 298	40 37 40 43 43	9/20 9/21 9/21 11/21 9/21	m m m m	6/51 6/51 7/50 6/51 8/50	Pl Pl Tr Pl Tr	FCJ FCJ KY FCJ JER
1202 1229 1230 1236 1243	68 74 78	314 304 306 310 310	332 343 346	620 617 619	685 667		330 349 338 348 361	302 295 297 301 292	339	289	359 362 324 323 315	40 38 37 38 35	9/20 10/21 10/21 8/20 10/21	f f m m	2/50 11/52 6/51 6/51 11/52	Tr Ll Pl Pl Ll	FCJ FCJ TO
1248 1250 1256 1260 1280	85	310 318 317 304 323	348 358 355 345 339	631 627	683 695 683	351 357 356 345 370		305 302 321 309 334		388	390 444 352 372 389	35 42 38 38 44	10/20 9/20 9/20 10/21	f f m m	6/51 6/51 6/51 6/51 8/50	Pl Pl Pl Pl Tr	FCJ FCJ FCJ FCJ JER
1280 1281 1284 1288 1299	85 80 85 90	338 338 321 322 334	362 348 346	649 640 646	753 709		366 361 351 358 369	353 331 321 314 341	359 371	374 431 369 299 363	484 478 408 300 442	45 44 40 44 44	9/20 9/19 10/21 9/21 11/22		8/50 8/50 6/51 8/50 8/50	Tr Pl Pl Tr Tr	JER KY FCJ JER JER
1304 1318 1319 1321 1326	86 98	330 335 335		667 661 677	736 726 741	362 382 371		318 339 326	329 331	437 356 410	466 469	45	/	f m m	2/50 11/52 1/51 11/52 11/52	P1 L1 Tr L1 L1	JWR TO JER III III
1344 1348 1349 1351 1355		347 346	362		765 758 734	386 383 385 368 394	380 392 389 372 382	361 322 328	390 350 391	439 456 313		41 43 41 46	9/19 10/19 11/21 9/21 9/20	f m	7/50 11/52 11/52 11/52 8/50	Pl Ll Pl	KY III TO KY

Table 6. Yellowfin from the Central Equatorial Pacific:
Phoenix Islands (Continued)

Total Length	Weight	Head Length	Snout to Ins.	Snout to Ins. 2nd Dorsal	Shout to Ins.	Snout to Ins.	Ing. Ventrals to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Dorsal	Height Anal	Diamster Iria	No. Gill Roking	36.X	North and Year	Geest	Extraction of the second
1357 1358 1361 1366 1373	109 104 113 107	341 341 341	362 371 369 373 372	662 672 676 687 678	732 734 745 749 768	366 386 384 381 394	370 370 380 373 377	335 360 333 348 329	373 332 334 349 357	399 452 307 410 445	467 510 392 490	39 45 43 40 45	9≠20 9≠21 9≠19 9≠21 8≠22	m m f m m	11/52 2/50 6/51 11/52 7/50	Lî Tr Pl	TO JWR FCJ KE
1376 1385 1389 1390 1390	113 112 118 105 116	341 342	385 380 395 382	692 705 711 705 706	756 758 778 772 772	381 378 376 410 361		336 334 355 379 345	373 361 372 359 367	453 506 439 464	550 489 542 385 566	41 41 42 49 43	11/20 11/20 11/22 9/20 10/21	m m m m	11/52 11/52 11/52 8/50 11/52	L1 L1 Tr L1	III III III JER III
1391 1401 1416 1420 1454	116 113 108 119 125	354	390 370 396 395 395	696 703 710 715 709	772 773 771 795 786	381 377 378 390 397	399 394 403 413 395	345 335 367 352 345	381 375 374 357 380	464 439 517 544 410	518 474 597 497	42 44 43 44 42	11/21 10/20 9/20 10/21 10/21	m f f n	11/52 7/50 8/50 11/52 11/52	L1 Tr L1 L1	III KE JER III III
1457 1468 1470 1502 1505	126 131 135 133	365 374 366 374 369	399 399 407 403 400	727 730 739 744 743	793 798 815 819 813	415 410	399 411 425 418 412	366 372 362 362 364	361 390 376 378 388	610 483 436 552 611	694 560 500 640 673	46 44 43 45 46	9\20 9\20 9\20 9\20 9\20	m m m m	11/52 8/50 11/52 11/52 11/52	Pl Ll Ll	TO KY TO TO
1681	187	400	42€	808	907	468	467	410	395	524		48	9,421	m	7/50	Lì	KE

Table 7. Yellowfin from the Western Equatorial Pacific: Eastern Marshalls

1114		282	311	572	623	309	310	263	325	234	328	37	9/20	ſ	2 /52	Ll	TO
1183	64	301	335	605	663	334	330	282	326	340		39	11≠20	m	2/52	Li	GIM
1222	67	306	329	610	665	334	332	295	356	347	406	40	8≠19	m	'	Ll	RS
1226	67	302	332	609	657	338	323	292	347	308	370	40	10/20	f	2/52	Ll	RS
1265	75	314	347	644	696	351	350	296	345	358	3 69	40	9,421				GIM

Table 7. Yellowfin from the Western Equatorial Pacific: Eastern Marshalls (Continued)

Total Length	Weight	Head Length	Snout to Ins. Ist Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins. Ventral	Ins. Ventrals to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Dorsal	Height Anai	Diameter Iris	No. Gill Rakers	Sex	Month and Year	Gear	Examiner
1271 1279 1296 1307 1309	80 85 97 82 91	318 314 321 330 330	353 355 369		702 703 712 713 715	350 352 357 367 367	357 350 363 341 357	310 315 327 309 322	361 358 350	383 356 400 349 360	433 388 442 466 428	39 40 38 43 40	10/19 9/18 9/20 10/20 8/22	m m m f m	2/52 2/52 2/52 2/52 2/52 2/52	L1 L1 L1	TO RS GIM RS
1317 1325 1333 1336 1355	98 97 100 109	332 330 335 327 335	365 368 366	677 682	715 738 743 737 747	362 369 371 382	378 374 365 362	325 326 329 332 342	356 363		437 433 443 615 541	40 40 42 46 43	10/21 10/20 9/21 9/19 9/20	m f f f m	2/52 2/52 2/52 2/52	Ll Ll	TO TO GIM GIM
1359 1365 1367 1377 1379	106	332 341 345 341 347	380 378 381	697 692		378 390 380 381 385	369 369 381 391 392	331 351 337 336 361	356 351 358 357 359	541 467	480 646 651 561 573	41 45 43 44 43	9/19 8/20 9/19 10/21	m m f f	2/52 2/52 2/52 2/52 2/52	L1 L1 L1 L1 L1	RS TO GIM
1380 1385 1392 1397 1402	108 100 112		374 374 378	678 701 705	756 774 778	372	395 398 389 404 392	340	358 370 339 361 374		565 631 556 482 547	44 44 41 41 45	10/21 10/20 10/20 10/20 9/21	f f m f m	2/52 2/52 2/52 2/52 2/52 2/52	L1 L1 L1 L1	RS RS TO RS
1403 1404 1410 1415 1420	121 113 121	346 345 366	387 387	705 690 703	772	390 413	390 377 387	361 339 373	330 355 363	352 411 620	562 484 684	42	10/20 9/20 10/20	m m	2/52 2/52 2/52 2/52	Ll	GIM TO
1425 1435 1437 1441 1456	125 123 121	359 360 358	399 400 397	724 724 723	789 797 790	394 399 393	403 404 399	360 347	396 387 369	561 463 524	655 661 503 608 522	43	9/20 10/21	f	2/52 2/52 2/52 2/52 2/52	Ll Ll Ll	RS RS

Table 7. Yellowfin from the Western Equatorial Pacific: Eastern Marshalls (Continued)

Total Length	Weight	Head Length	Shout to Ins.	Shout to Ins.	Snout to Ins. Anal	Snout to Ins. Ventral	Ins. Ventrals to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Dorsal	Height Anai	Diameter Ivis	No. Gill Rakers	Sex	Month and Year	Gear	Examew
1473	131 128 131 125 129	1	395 397 401 404 413	735 739 731	798	401 402 394 417 411	413 414 430 387 418	366 366	370	474 616 532	562 445 682 587 608	44 44 44 46 47	9/19 8/20 9/22 9/19 9/20	m m	2/52 2/52 2/52 2/52 2/52 2/52	L1 L1 L1 L1	GIM TO TO RS RS

Table 8. Yellowfin from the Western Equatorial Pacific: Western Marshalls

336 388 458 492 514	3,4 4,8	111 140 138	129 146 156	218 252 268	235 275	145	114	105 120 129	101 117 138 154 164	27 42 51 62 62	30 39 46 56 59	19 21 22 24 27	9/21 9/21 9/20 8/20		8/51 8/51 7/51 7/51 */47	L1 L1 L1	Mac Mac Mac Mac JCM
522 523 525 526 529	5.3 6 6	149 149 152 155 154	168 164 171	282	321 324	162 177 182	154 155	132 130 135	163 170 157 154 161	60 66 63 57 67	60 63 61 54 65	28 27 26 28 27	8≠20 10≠21	m	*/47 7/51 */47 */47 7/51	L1 Tr Tr	MAC TCM AAC MAC
530 533 534 536 540	6	15 2 157 153	160 170 166	294 294	323 328 324	173 174 176 172 175		131 132 125	158 165 159 173 168	59 62 61 65 72	56 60 60 62 67	27 27 27 27 26			*/47 */47 */47 */47 */47	Tr Tr Tr	JCM JCM JCM JCM
541 544 546 547 549	6.5 6.5	158 156 156	170 168 168	299 294 300	329 329 325 332 326	177 173 175 175 175			172 174	59 63 67 65 68	62 64 63 65 63	27 27 28 30 29			*/47 */47 */47 */47 */47	Tr Tr Tr	JCM JCM JCM
551 552 553 561 565	6 7 7 7 7	158	166 173 170 170 175	305	330 337 336 336 336	180 180 181 480 183		134 140 137 137 140	171 165	66 63 64 70 69	60 64 63 70 61	28 27 29 26 29			*/47 */47 */47 */47	Tr Tr Tr	JCM JCM JCM JCM

^{*}From July 19 to August 26.

Table 8. Yellowfin from the Western Equatorial Pacific: Western Marshalls (Continued)

																	Librar 4016 i
Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	to	Spout to Ins, Anal	Smooth to Ins.	Ins. Ventrals to Ant. Edge Vent	Greatest Body Depth	Length Pertoral	Height 2nd Dorsal	Height Andl	Diameter Iris	No. Gill Rakers	Sex	Month and Year	Gear.	Skinither
567 577 585 585 585	8.1 9 7.5	164 168 170 171 168	189 191 184	317 319 316	345 347 328 354 355		166 164 174		186	71 74 85 71 84	67 69 77 70 82	28 28 31 29 29	9/21 10/20 9/19	f m	*/47 8/51 7/51 */47 7/51	Ir Ll Ll Tr Ll	WVC JCM
596 598 600 605 621	8 ₀ 5	170 169 173 170 175	189 186	324	346 351 355 353 369	183 185 195 185 190		151 153 152 152 153	181	79 84 74 77 84	75 83 75 82 83	25 31 31 30 30	10/21 9/20 3/20	m m	7/51 7/51 */47 */47 7/51	Ll Tr Tr Ll	
655 661 666 676 726	11 11 11 12.5 14	184 181 186 186 202	200 202 203	350 354 354 362 388	385 391 390 396 428	210 202 210 207 229		163 167 159 167 178	212 194	94 91 85 100	93 93 83 98	29 29 31 29 30			*/47 */47 */47 */47 */47	Tr Tr Tr Tr	JCM JCM JCM JCM JCM
739 763 787 826 837	17 18 19 21.5 21.5		221 227 245		432 454 450 486 484	227 249 235 260 256		181 188 185 197 211	211 223 236 244 252	136	99 127 107 118 130	31 32 32	Action of the Control		*/47 */47 */47 */47 */47	Tr Tr Tr Tr	JCM JCM JCM JCM
839 846 897 931 933	23.5 27 30	230 242 243	247 259 286		490 513 521	244 255 271 264 280		205 213 223	260 248 272 290 258	144 174 209	144 179 200	35 32 33 37			*/47 */47 */47 */47 */47	Tr Tr Tr Tr	JCM JCM JCM
935 943 1015 1041 1078	45 45	254 258 268 268 277	281 287 297	517	552 573 589	281 286 301 303 308		235 247 251	273 285 304 294 307	173 170	167 176 248	35 35 34 35 37			*/47 */47 */47 */47 */47	Tr Tr Tr Tr	JCM JCM JCM

^{*}From July 19 to August 26.

Table 8 Yellowfin from the Western Equatorial Pacifics Western Marshalls (Continued)

Total Length	Weight	Head Length	Smout to In lst Dorsal	Smout to Im., 2ml Dersal	Smort to In.	Shout to Inc.	Inc. Ventrale to Agi, Edge Rept	3. ze trs. Boly Orpo	Language Period	Height and Deced	सन्दर्भात सेवन	Olement Iris	N . Gill Raker	C.3.	M.ash and Yea	q. /	100 T. L. D. S.
1103 1501 1513 1522 1525	52 1334 1514	282 364 366 372 376	425 406	550 754 740 759 745	622 822 806 828 827	401 403 416	422 417 425 434	373 384	317 379 363 387 387	247 550 495 582 521	306 594 548 631 656	38 44 41 42 47	9≰20 8 ≰2 0	m m m	*/47 5/51 5/51 5/51 7/51	TR L1 L1 L1 L1	IC.A I'O WVC TO WVC
1542 1561 1564 1652 1689	148 155 4 165 <u>4</u> 1634 1622	381 370	434 426 448	776 766 811	849 834 843 885 924	416 403	437 458 455	392 391	375 398 393	561 500 597 652 632	693 818	44 46 45 49 46	10/21 9720 8/19 9/21	m m m m	5/51 7/51 7/51 7/51 7/51	L1 L1 L1 L1	MAC MAC MAC

Table 9. Yellowiin from the Western Equatorial Pacifics
Eastern Carolines

490 502 518 546 549	5.8	145 149	161 164 171	274 283 293	293 310 325	155 160 166 172 181	145 147 156	131 128 133		60 62 65 71 62	57 61 57 66 61	25 25 28 28 23	9≰18 8≠19 8≠20	f	4/51 6/51 8/50 8/50 6/51	L1 L1	TO WVC BMS BMS WVC
559 565 571	6,9	162 164 165	179 175 188	303 305 316	328 339 331	177 181 175	155 165 156	138 144 145	183 177	76 72 75 76 85	74 70 73 75 81	30 27 30 29 30	9⋠20 6⋠20 9∮19 9⋠20	m î m	6/51 6/51 7/50 6/51 6/51	Ll Ll Ll	WYC WVC BMS WVC WVC
579 579 585 586 587	7.8 9 8.9	166 165	186 180 196	320 316 329	343 350 354	183 181 180 184 184	165 170 173	147 151 154	190 184 192	86 80 79 88 80	85 78 80 78 84	30 28 28 28 28 28	9≠20 9≠19 9≠21	f	6/51 6/51 4/51 6/51 8/50	Ll Ll Ll	WVC WVC TO WVC BMS
587 588 591 592 605		169 167	179 182 186	323 321 319	354 350 346	183	173 164 165	145 143 145	185 181 190 190 194	82 80 80 86 85	80 77 79 82 88	28 29 29 28 28	9≠20 9≠20	m Î	6/51 4/51 8/50 7/50 7/50	L1 L1 L1 L1 P1	i

^{*}From July 19 to August 26

Table 9. Yellowfin from the Western Equatorial Pacifics Eastern Carolines (Continued)

	,				·										incontrappe dissif A co.		
Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Shout to Ins. End Dorsel	Snout to Ins. Anal	Snout to Ins. Ventral	Ins. Ventrals to Ant. Edge Vent	50, 500	respect quant	Height 2nd Dorsal	Holght Anal	Dimmeter Itis	No. Gili Rakers	Sex	Manth and Tear	Cea?	Examings
605 611 614 626 630		172 174 178 176 176	188 191 187 191	325 331 329 335 335	357 360 361 363 369	188 191 195 198 194	175 176 174 174 179	165 164	204	90 82 90 101 97	90 81 90 96	29 30 29 29 29			8/50 7/50 7/50 8/50 8/50	Li Li Li Li	BMS BMS BMS BMS BMS
636 639 641 647 660		181 180 180 179 187	201 195 195 193 206	343 346 346 344 353	373 380 382 378 386	202 201 203 190 207	178 184 182 190 187	159 164 154		102 91 99 95 103	102 92 99 95 106	30 29 31 30 30			8/50 8/50 7/50 8/50 7/50	L1 L1 L1 L1	BMS BMS BMS BMS BMS
661 662 674 676 677		187 186 182 186 191	201 208 205 207 210	360 363	393 397 396 397 401	206 207 203 212 213		166 167 170	214 209 222	97 100 95 103 97	92 100 94 108 103	31 28 26 30 30			7/50 7/50 8/50 8/50 8/50	L1 L1 L1 L1 L1	BMS BMS BMS BMS BMS
681 683 687 688 689		186 189 191 193 198	210 206 212 216 218		391 408 404 399 409	208 209 212 208 218	189 207 200 191 196	171 168 180	217 219 208		123 103 107 107 122	30 31 32 30 32	10/22	f	8/50 8/50 7/50 5/51 7/50	Li Li Li Li	BMS BMS BMS TO BMS
692 697 703 704 705		193 196	214 218 217		411 411 413	211 218 216	201 197 205	174 169	235 213 218		105 110 113	28 29 31 33 31		f	8/50 4/51 8/50 8/50 7/50	LI LI LI LI	ems ems ems ems ems
706 719 721 722 724		196 198 200 198 196	215	378 325 383	422 425 426	224 226 221	207 206 211	178 182	227 224 241	112		31 31 31 31 33			8/50 8/50 6/50 8/50 8/50	L1 L1 L1 L1	BMS BMS BMS BMS BMS

Table 9. fellowfin from the Western Equatorial Pacifics
Eastern Carolines (Continued)

																,	
Total Length	Weignt	Read Length	Snout to Inc.	Sport to Inc. 2nd Dorsel	Shout to Lus.	Smout to Ins.	Ant. Edge Vent	Grealest Body Depth	Length Per town.	Beight and Dorsal	Reight Aurl	Diamater Iris	Mo. Gill Rakers	SOS	Month and Yosr	दुङसङ्	· Programme
724 737 754 761 769		200 204 209 203 207	217 226 231 219 228	381 390 395 397 397	421 423 438 434 443	225 226 236 228 237		180 186 183			110 121 138 138 123	33 30 30 29 31			8/50 8/50 7/50 8/50 8/50	Ll Ll Ll Ll Ll	BMS BMS BMS BMS BMS
773 785 787 788 798		208 215 214 215 218	226 234 229 233 237	397 414 410 417 417	443 457 452 453 457	232 250 236 238 238	215 226 221	182	257 238 230 243 236	127 128 146 126 126	138 132 157 128 133	33 32 33 32 31			8 /50 8 /50 8 /50 9 /50 7 /50	L1 L1 L1 L1	BMS BMS BMS BMS BMS
800 808 814 819 822		217 220 218 223 222	243 247 236 245 248	420 427 422 427 434	461 466 461 475 473	242 244 249 246 249	232	189 209	253	141 147 133 141 137	161 149 146 159 150	31 32 34 33 33			8/50 7/50 8/50 7/50 8/50	L1 L1 L1 L1	BMS BMS BMS BMS BMS
836 845 849 852 857		229 226 228 222 233	252 255 251 249 255	436 445 441 438 449	486 488 490 486 492	255 254 254 251 261	239 245 240 234	201 202 211 194 214	254 254 269 263 263	154 150 156 145 147	160 155 178 167 187	34 32 34 33 33			8/50 8/50 8/50 8/50 8/50	Li Li Li Li	BMS BMS BMS BMS BMS
859 860 863 882 885		234 230 230 236 236	248 255 253 255 264	450 454 458		250 253 264	235 241 240 240 254	215 208 208	272 272	175 171	189 187 206	33 34 33 35 35		f	8/50 7/50 8/50 8/50 4/51	Li Li Li Li	BMS BMS BMS BMS TO
886 889 889 896 901		239 234 237 241 238	261 265 259 269 258	467 459 468	505 503 512 512 507	258 263 273		205 211 220	280 290 261	179 164 162 169 171	198 183 186 195 183	34 34 34 35 35			8/50 8/50 8/50 8/50 8/50	L1 L1 L1 L1	BMS BMS BMS BMS BMS

Table 9. Yellowfin from the Western Equatorial Pacifics
Eastern Carolines (Continued)

		2					-				princer stating				parenta atauna est may		parameters and
Total Length	Weight	Head Longth	Snout to Ins.		Juout to Ins Anal	Sport to Inc Ventrel	Ins. Ventrals to Anto Wige Vent	Greatest Body Depth	Longon Pectoral	Helight ond Dorcell	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Mensk and Xeaz		Tablitan.
915 916 924 926 930			268 272 272 272 177 277	475 476	519 523 521 526 533	272 270 273 293 269	253 263 253 260 273	219 224 217 214 221		176	206 190 161 194 170	33 38 34 35 32			8/50 8/50 8/50 8/50 7/50		BMS BMS BMS BMS BMS
932 946 946 971 972		247 249 254 256 255	266 269 280 283 283	483	527 540 535 539 543	277 274 278 284 280	251 272 269 268 272	219 225 234 235 229	280 293 296 302 278	200 190 175	191 234 208 197 210	34 35 35 34 35			7/50 8/50 8/50 8/50 6/50	Ll Ll Ll Ll	BMS BMS BMS BMS BMS
979 979 979 981 985		255 258 260 255 251		499 503	547 554 549 553 548	285 289 298 290 284	269 278 267 273 272	238 229 231 235 226	310 297	205 229		36 36 34 36 35			8/50 8/50 7/50 8/50 8/50	Ll	BMS BMS BMS BMS BMS
1046 1072 1083 1084 1087		272 276 282 284 278	300 306 308 309 308	535 542 554 557 543	582 596 605 612 592	307 313 312 313 305	285 291 305 313 296	238 254 265 269 254	311 331 324 322 341		294	37 37 38 36 36			8/50 8/50 9/50 8/50 8/50	Li Li Li Li Li	BMS BMS BMS BMS BMS
1088 1108 1136 1144 1144			318	562 568 577	616 630 622	317 327 314 320 323	304 324 311	261 272 281 267 268	341 320 343	258 281 322	316 340	36 36 38 37 36			8/50 7/50 7/50 7/50 8/50	Li Li Li	BMS BMS BMS BMS BMS
1147 1154 1155 1158 1163		281 290 297 294 295	322 324	579 583 577		318 334 335	312	269 279 273	354 329	291 292 290	295 324 325 369 322	37 39 38 39 37			7/50 8/50 8/50 8/50 8/50	L1 L1	BMS BMS BMS BMS BMS

Table 9. Yellowfin from the Western Equatorial Pacifics Eastern Carolines (Continued)

															-		
Total Length	Weign?	Bead Long's	Smouth to Inc.	Sacra to Inc. And Dersaa	Sucur & In	Smort to In Venitral	Ins. Ventrals & Ant. Edge Yer	Breatent Body Desyn	Tenstend Resters	Reight and Dursei	Reight Anel	Diameter Iris	No. Gill Rakers	કેટ	Month and Year	Quan-	Besindates
1168 1170 1170 1179 1195		298 292 292 302 299	326	585		332 323 329 335 331	320 331 327 315 334	289 284 274 278 291	337 320 326 320 347	334 285 300 322 364	348 319 312 391 408	37 37 37 38 37			8/50 8/50 8/50 8/50 7/50	L1 L1 L1 L1	BMS BMS BMS BMS BMS
1210 1225 1227 1232 1235		310 308 313 313 312	340 340 354 350 345	602 624 626	664 664 680 689 683	348 337 349 350 347	331 337 339 345 353	294 298 288 301 303	35 5 327	356 280 332 391 364	397 385 409 423 385	40 40 40 40 40			8/50 3/50 8/50 8/50 8/50	Ll	BMS BMS BMS BMS BMS
1236 1243 1257 1274 1282		308 317 323 323 324	346 350 349 361 350	630 647	676 688 687 706 711		350 349 338 359 360	300 299 312 315 331	346 333		412 351 426 503 416	41 38 38 41 40			8/50 8/50 8/50 8/50 8/50	L1 L1 L1 L1	BMS BMS BMS BMS BMS
1289 1295 1314 1317 1320		325 317 327 323 328	350 359 369 355 367	638 647 654 651 662	711 710 712 708 727	370 350 368 363 361	350 372 354 358 377	323 323 333 324 318	336	434 406 425 392 387	508 472 457 430 440	41 42 41 39 38			8/50 7/50 8/50 8/50 8/50	L1 L1 L1 L1 L1	BMS BMS BMS BMS BMS
1327 1336 1341 1350 1357	39	336 332 345	358 377 381	655 650 666 675 668	735 721 750	376 373 384	361 383	341 331	353 374 346	443 450	650 498 498	42 45 40 42 41		f	8/50 7/50 8/50 8/50 4/51	Ll	BMS BMS BMS BMS TO
1358 1365 1372 1375 1378		345 339 341 346 351	362		747 744 748 760 748	380 372 381 387 397	380 392 381 382 357	324 34 5 337	370 387	518	573 489 554 6 12 545	45 40 41 43 45			8/50 8/50 8/50 8/50 8/50	L1 L1 L1	BMS BMS BMS BMS BMS

Table 9. Yellowfin from the Western Equatorial Pacific: Eastern Carolines (Continued)

								-u/lo.e/ 'appe an elle				NAMES OF TAXABLE PARTY.			District to a growth to the water		METRICAL YETH
Total Length	Weight	Head Length	Snout to Inc. let Derred	t to Dor	Groat to Ins Ansl	Spout to In. Ventroi	Inc. Vertizal. to Ant. ElmoVent	Gratort Boly Depth	Length Perboral	Height and Dorsal	Seight Anal	Diameter Iris	No. Gill Rakers	Ser	Nonth and Year	Cast	Exandner
1378 1379 1381 1384 1384		351 357 347 341 351	379 387 375 561	688	753 764 756 752 756	398 396 387 386 397	3 78 3 80	349 354	375 362 360 350 362	41.2 462	545 581	47 44 43 48 41			7/50 8/50 8/50 8/50 8/50	Ul Ll Ll Ll	BMS BMS BMS BMS BMS
1386 1387 1397 1401 1425		349 342 347 347 354	371 382 381	693	765	390	1 1	324 357 353	374	380 490 454		43 44 44 43 42			8/50 8/50 8/50 8/50 8/50	L1 L1 L1 L1	BMS BMS BMS BMS BMS
1428 1440 1458 1475 1477		350 361 352 360 356			782	392 403 401 411	396 403 410 410 405	352 373	370	621 535 573	1	42 43 41 44 43			7 /50 8/50 8/50 8/50 8/50	Li Li Li Li	BMS BMS BMS BMS BMS
1479 1499 1500 1509 1512	126	364 374 364 381 362	417 404	740 748 742		409 410 425	413 433 422	381 386	583 3 89	639 542	588	42 45 43 46 41		f	8/50 8/50 8/50 8/50 5/51	L1 L1 L1 L1	BMS BMS BMS BMS TO
1520 1522 1526 1536 1551	146 <u>3</u>	379 366 382 396 390	433 409	760 761	836	409 394 423 433 434	431 433	390 394 399	365	622 600 608	678 632	44 44 45 44 48	7/20	m m m	8/50 6/51 8/50 6/51 8/50	L1 L1 L1 L1	BMS WVC BMS TO BMS
1557 1568 1571 1578 1579		390 379 379 387 384	41.7 426 434	773 757 770 768 787	849 839 849 840 859	417 418 430	430 436 438 431 450	382 382 401 395 408	378 384	540 503	752 715 652 777 564	48 47 45 46 43		m m	8/50 8/50 6/51 8/50 6/51	Ll Ll	BMS BMS TO BMS WVC
1676	165	393	446	823	908	444	470	395	397	621	759	41		m	4/51	Ll	TO

Table 10. Yellowfin from the Western Equatorial Pacifics Central Carolines

									1		0				1		
Total Length	Weight	Head Leagsh	Shout to Ins. Jat Dormal	Smout to Int.	Sacut to Inc. And	Shout to In., Venitsi	Ins. Vanher h. Aut. Edge Veat	ु १० है ।	Leogie Ferboul	Helykt val Deverl	Holfis angi.	Distant ter Inf.	No. Gill Rakers	#800 #800	Markhand Yesy	Carr	Ethaniae?
174 504 540 571 575		136 141 150 166 161	151 161 168 176 180	261 276 291 308 314	299 321 336	153 157 767 186 177	1.56	136 136	171 184	58 6 9 73 77 80	53 63 68 77 79	24 24 26 20 27			7/50 6/50 7/50 7/50 6/50		BMS BMS BMS BMS BMS
581 593 606 616 622	10	168 172	184 184 187 192 194	335	365 357 369	187 187 190 191 202	181 175	144	200 193	78 82 85 88 84		29	10∮20		6/50 6/50 7/50 7/50 6/50	L1 L1 L1 L1 L1	BMS BMS BMS BMS BMS
636 637 643 645 649			199 199 201 199 205	341 553 351 351 351		200 201 209 207 207	188 191 180 192 190	161 160 160 162 160	201	98 92 90 100 98	,	28 29 30 29 30			7/50 6/50 6/50 6/50 6/50	L1 L1 L1 L1	BMS BMS BMS BMS BMS
667 680 682 704 707		189 191 192 198 192	204 210 210 218 218 210	358 366 370 379 368	396 401 407 418 408	213 205 217 225 209	192 201 195 195 207	179 162	219 235 220	112	117 118	32 30 30 31 30			7/50 6/50 6/50 6/50 12/50	L1 L1 L1 L1	BMS BMS BMS BMS KE
707 729 732 737 738		201 199 201	223 225 223	386 384 390	415 424 439 429 440	232 221 224	198 217 209	184 161 178	238 242 228	121 110 121	131 119 129	30			7/50 7/50 12/50 7/50 6/50	L1 L1	BMS BMS KE BMS BMS
742 746 750 753 756		207	231 229 227	402 404 393	439 443 449 454 446	235 252 245	218 219 217	183 186 187	245 236 240	126		29 33 34 33 31			6/50 6/50 6/50 6/50 6/50	Li Li	BMS BMS BMS BMS BMS

Table 10. Yellowfin from the Western Equatorial Pacific: Central Carolines (Continued)

. Length	1.	Length	to Ins. Dorsal	to Ins. Dorsal	to Ins.	to Inc.	Ventrals to Edge Vent	इ.स. छिट	E Fectoral	it and Dorsal	it Amal	ameter Irlu	Gill Rakers		and Year	VE3\$F4€ C	in U
Total	Weight	Неад	Spout	Snout 2nd D	Snout Anal	Shout to Ventral	Ins. L	Greates Dopth	Length	Height	Height	Diame	No. C	29.X	Ecrts	Geal	Examinar
757 761 766 773 781		221	228 220 234 240	416	440	241 227 237 234 239	232 214	184 196 193	243 239 254	129 124 129 134 137	134	33 32 31 31 32			6/50 12/50 6/50 6/50 7/50	L1 L1 L1 L1	BMS KE BMS BMS BMS
788 791 801 807 814	20		242 236 238 241 240	416 417 419 423 424	453 461 473	242 240 237 252 250	229 227 238 237 231	202	253 269 262	132 136 156 135 144	135 135 169 148 149	33 32 33 32 32 32	9,419		7/50 6/50 7/50 6/50 12/50	L1 L1 L1 L1	BMS BMS BMS BMS KE
817 820 825 829 831		223 220 218 220 224	244 249 252 249 254	427 434 436 431 430	489 477 488 483 485	256 247 252 254 248	241 231 243 237 238	204 198	252 281 260	153 146	152	33 33 31 32 34			6/50 7/50 6/50 6/50 6/50	L1 L1 L1 L1 L1	BMS BMS BMS BMS BMS
833 848 849 858 861		223 226 229 226 230	247 240 251 251 254	433 429 438 444 443	483 512 495 493 489	253 293 262 250 260	242 235 242 252 239	221 201 212	257 270 264	166 143 151 160 179		34 34 32 33			7/50 6/50 7/50 7/50 7/50	L1 L1 L1 L1	BMS BMS BMS BMS
861 863 866 874 875		232 231 230 238 233	258 252 261	453 459 442 454 449	497 507	265 266 250 263 273	250 246 246	212 211 214	264 276	166 154 163	173	33 31 33 33 35	9≠19		6/50 6/50 7/50 7/50 6/50		BMS BMS BMS BMS BMS
879 882 893 900 909		234 241 240 240 245	258 263 265 268 279	465	506 492 507	270 266 253 269 275	250 246 246	213 228 220	302	156 178 160	181 203 173	31 33 32 35 56		f	6/50 7/50 7/50 7/50 6/50	L1 L1 L1 L1 L1	BMS BMS BMS BMS BMS

Table 10 Yellowfin from the Western Equatorial Pacifics Central Carolines (Continued)

			 _								1 1				1 1	-	i
Total Length	Weight	Head Langth	Shout to Ins. Ist Doresi	1 50 E	SECENT ACTION	Store in Auso Variable	కోట్కి Vనట్కిద్ద గ. ఈక్షి క్షేజైం కోట్ను,	42 1	There's and African	Keight in line	ర్జక్షిస్తున్ని	Dহুশ্লাদেইকল কুল্ডি	No Gill Rakera	Ser	Mark as Tea	Garage .	Erani o - g
914 915 920 920 934		244 243 245 246 245	270	472 478 474		270 281 27.	2.48	218	287 268 290	153 167	192 171 180 195 192	34 33 37 35 35 35			6/50 7/50 6/50 6/50 7/50	L1 L1	BMS BMS BMS BMS BMS
941 941 948 949 958		243 244 254 249 254	278 263 276 282 283	476 491 488	541	273	273 271	224 221 223	310 285 297	188 187 187	205 201 198 198 209	33 34 35 36 33			8/30 7/50 7/50 6/50 7/50	Ll	BMS BMS BMS BMS BMS
960 963 967 975 983		249 249 257 252 259	275 285 285	492 498 486	542 547 539	290 281 286 280 293	271 275 271	235 229 234 241 227	300 289 280		218	34 34 35 37			12/50 6/50 12/50 7/50 7/50	L1 L1 L1 L1	KE BMS KE BMS BMS
985 99 3 997 999 1002	3 6	257 260 252 256 259	281 281 285 294 275	498 505 512	559 563	237 293 281 286 293	281 298 279	236 230 235	396 314 319	193 205 202 240 207	230 224 260	36 36 33 35 34	3 7 19		7/50 7/50 7/50 6/50 6/50		BMS BMS BMS BMS BMS
1002 1004 1005 1007 1008		259 261 263	286	511 512 511	562 565 565 560 555	289 294 290	282 2 85 277	240 230 238	312 291 315		214 222 218	34 36 34 34 35	ACCIDING TO A COLUMN TO A COLU	m.	6/50 6/50 6/50 7/60 7/50	L1 L1 L1	BMS BMS BMS BMS BMS
1008 1015 1022 1025 1026		265 263 270 259 264	289 294	519 533 530	562	302 312	275 285 285	244 258 244	311 340	192 233 214	205 284	36 35 34 34 35			6/50 7/50 6/50 7/50 6/50	L1 L1 L1	BMS BMS BMS BMS BMS

Table 10. Yellowfin from the Western Equatorial Pacifics Central Carolines (Continued)

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins.	Snout to Inc.	Smout to Ins. Ventral	Ins. Ventrals to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Dormal	Height Anal	Dlameter Tris	No, Gill Rakers	X98	Lionth and Year	Genz	Examiner
1031 1032 1037 1043 1047		264 267 271 274 269	285 290 294 301 296	510 517 523 524 524	574 567 591 582 593	293 294 300 301 305	288 280 297 290 295	241 245 237 253 251		234 191 257 202 222	258 236 263 237 245	34 35 36 35 34			7/50 6/50 6/50 7/50 6/50	L1 L1 L1	BMS BMS BMS BMS BMS
1047 1053 1055 1059 1060	43	274 268 269 271 269	298 307	512 535 526 523	583 585 578 586 580	309 300 301 303 294	285 290 287 297 305	246 255 246 246 238	333 313 310	199 241 241 232 194	222 269 255 272 214	37 35 35 36 34	8 <i>¥</i> 20		6/50 7/50 7/50 6/50 6/50	L1 L1 L1 L1 L1	BMS BMS BMS BMS BMS BMS
1060 1064 1067 1067 1068		272 270 271 279 280	298 293	547	593	299 327 303 306 322	298 297 305 301 299	239 247 245 246 255	309 316 312	245 230 259	1	36 35 35 38 39			7/50 6/50 7/50 6/50 6/50	L1 L1 L1 L1	BMS BMS BMS BMS BMS
1069 1069 1074 1078 1086		271 277 279 276 270	304	535	598 607	298 312 321 307 299	318 298 301 313 306	255 261 259 240 250	314 330 328 320 320	267 255 233	245 288 312 256 308	38 35 36 35 35			6/50 7/50 6/50 7/50 6/50	L1 L1 L1 L1	BMS BMS BMS BMS
1090 1099 1100 1102 1104		287 281 282 288 285	308 310 323	549 556 567	600 616 604	325 322	301	261 260 267	334 347 325	255 237 248 252 256	279 288 275	37 35 36 35 37			6/50 7/50 7/50 7/50 6/50	L1 Z1	BMS BMS BMS BMS BMS
1105 1108 1109 1113 1113		280 288 279 281 290	316 305 310	558 550 562		318	312 314 311	271	332 353	268 297	300 317 259	36 37 37 38			7/50 6/50 7/50 6/50 7/50	L1 L1 L1	BMS BMS BMS BMS BMS

Table 10. Yellowfin from the Western Equatorial Pacifics Central Carolines (Continued)

										·							·
Total Length	Weight	Head Longth	Shout to In: lat Dorsal	Shout to Ins.	Snout to Ins.	Shout to Inc.	Ins. Ventrals to Ant. Edge Vent		Length Pertonal	Height 2nd Dorosi	Hoight Anal	Diameter Iris	No. Gill Rekers	Sex	Month and Year	Geen	Examiner
1115 1120 1123 1123 1128		282 285 283 284 285	313 327 315	559 567 574 563 566	627	315 316 321 318 326	314 314 319	263 264 273 271 268	321	265 269 288 257 257	307 302 320 327 316	37 36 37 35 36			7/50 7/50 6/50 6/50 6/50	L1 L1 L1 L1	BMS BMS BMS BMS BMS
1130 1130 1133 1134 1134		287 291 284 286 288	322	583 576 568 580 571	632 643 636 632 623	324 323 320 321 323			337 330 333	246 271 261 326 271	282 322 314 358 296	36 36 37 37 37			6/50 7/50 7/50 7/50 7/50	L1 L1 L1 L1 L1	BMS BMS BMS BMS BMS
1142 1144 1148 1168 1170		289 298 295 302 300	335 338 328	569 578 579 582 572	627 624 627 656 675	325 325 328 351 354	311 304 304 315 342	269 287 280 281 267		306 331 315 287 280	353 352 355 304 328	39 38 39 38 39			7/50 7/50 6/50 6/50 6/50	L1 L1 L1 L1	BMS BMS BMS BMS BMS
1183 1189 1192 1196 1202		303 307 302 301 301	338 349 333 337 341	597 614 595 593 611		340 344 327 338 339	329 316 326 333 345		314	334 351 334 349 375	371 397 374 417 409	38 39 38 39 40		f	7/50 7/50 6/50 7/50 7/50	L1 L1 L1 L1	BMS BMS BMS BMS BMS
1204 1206 1207 1210 1215		324 301 333 304 296	372 341	661 606	673 726	342 374 341	337 388 324	294 321 291		271 484 350		42 37 42 37 38		m	6/50 7/50 7/50 7/50 7/50	Li Li Li Li	BMS BMS BMS BMS BMS
1232 1235 1238 1250 1251		316 301 312 316 313	330	619 609 630 622 621	661	359 340 363 353 341	332 340	294 301 313	348 340 326 371 338	359 309 368 361 359	386 374 404 390 402	39 38 37 38 38			6/50 6/50 6/50 6/50 7/50	L1 L1 L1 L1	BMS BMS BMS BMS BMS

Table 10. Yellowfin from the Western Equatorial Pacific: Central Carolines (Continued)

																39.7 To 1. Cal	
Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins Ventral	Ins. Ventrals to Ant. Edge Vent	Greatest Body Depth	Length Pestoral	Height 2nd Dorsal	Helght Anal	Dismeter Iris	No. Gill Rakors	Sex	North and Year	Cess	Erauther
1251 1251 1254 1 2 63 1265		315 319 317 314 308	345 358 348 352 344	620 630 629 627 638	683 691 712 700 707	352 364 375 338 358	341 341 342 369 348	314 333 316 303 296	356 341 342 354 341	321 397 356 359 289	447 490 425 410 291	40 42 40 39 41			7/50 6/50 6/50 6/50 6/50	L1 L1 L1 L1	BMS BMS BMS BMS BMS
1265 1265 1266 1272 1272		315 324 307 319 328	352	630 630 623 635 644	686 708 685 701 701	347 388 338 366 358	360 343 350 350 358	317 317 305 317 333	330 360 357 333 371	427 322	448 448 399 464 473	42 41 38 41 40			6/50 6/50 7/50 7/50 7/50	L1 L1 L1 L1	BMS BMS BMS BMS BMS
1276 1276 1276 1280 1290	- - - -	316 321 324 321 323	352 357 368 353 359	632 624 637 627 639	691 711 703 683 709	354 362 358 354 367	353 354 357 342 358	312 321 323 322 321	347 354 355 365 374	388	454 550 457 446 531	40 39 42 40 39			6/50 6/50 7/50 6/50 7/50	L1 L1 L1 L1 L1	BMS BMS BMS BMS BMS
1290 1292 1293 1294 1294		333 328 325 318 320	354 370 355 353 359	646 637 633	738 712 715 695 701	401 367 370 358 358	346 356 349 352 346	316 324 309 308 301	364 345 355 351 348	379	378 438 449 423 410	39 40 40 39 40		f	6/50 7/50 6/50 7/50 6/50	L1 L1 L1 L1	BMS BMS BMS BMS BMS
1297 1299 1301 1301 1301		324 317 319 321 332	343 354 370	628 651 628	703 733 708 709 725	380 366 357	366 341 368	311 317 319 312 398	351 366 373	352 307 398	391 429	38 39 40 41 41			7/50 6/50 6/50 7/50 6/50	L1 L1 L1 L1	BMS BMS BMS BMS BMS
1311 1313 1314 1317 1318		329 328 325 328 332	355 378 359	657 651 653	718 716 718 725 737	375 358 377	343 373	336 312 328 320 322	351 339 375 385 359	351 395	531 400 401 455 442	42 39 37 42 40		m	7/50 6/50 6/50 6/50 6/50	L1 L1 L1	BMS BMS BMS BMS BMS

Table 10. Yellowfin from a some Equatorial Pacifics Central Caroline (Londonued)

						pile consistence are						water water 1		,			
Total Length	Weight	Head Length	Smout to Ins. Lat Dorgal		.7	Snowt to Inc.		2 - 2 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 -		The management of the state of	HINGTO AND	Diameter Iris	No. Gill Bakes:	Sea	Month and Tear	Jeen.	Brootney
1318 1320 1325 1326 1335		332 328 329 385 327	374 372 352 378 368	666 653 661 698 662		370 369 364 456 371	360 368 375 392 365	314 333 330 375 334	358 370	56223 6623 5633 5633	524 593 489 206 509	38 43 40 54 41		m m	6/50 6/50 12/50 6/50 7/50	L1 L1 L1 L1 L1	BMS BMS KE BMS BMS
1335 1335 1335 1340 1344		334 334 336 324 334	382 369	665 671 663 660 669	742	375 380 378 370 370	362 369	318 318 337 330 345	547	417 310 390 481 457	441 464 571 542 490	42 40 42 41 42		f	6/50 6/50 7/50 6/50 6/50	L1 L1 L1 L1	BMS BMS BMS BMS BMS
1344 1349 1356 1366 1387		340 358 344 342 363		681 663 669 680 703	737 749 751 762 777	374 372 381 405 416	398 387		356 355 355	433 454 457 9	453 542 563 484 63 6	42 43 44 44		m m m	4/51 7/50 6/50 6/50 6/50	L1 L1 L1 L1	TO BMS BMS BMS BMS
1395 1405 1406 1409 1419		359 345 348 355 353	367 376 388 388 382	679 681 679 605 703	764 765 752 772 796	440 398 388 399 396	366 386 383 383 405	346 356 355 353 348	372 510 567 377 355	657 458 514 433 431	698 535 507 593 530	43 42 44 43		m m m	6/50 7/50 6/50 7/50 6 /50	L1 L1 L1 L1 L1	BMS BMS BMS BMS BMS
1420 1427 1427 1446 1450		345 355 348 375 359	376 390 4 00	711 722	787 794 798	393 411	405 41 4	352 36 2 34 5	375	4.70	549 521 578 544 591	43 43 45 45		m f f m	7/50 6/50 6/50 7/50 6/50	II Li Li Li	BMS BMS
1450 1459 1485 1486 1517		370 399 388 371 382	397 407 406 410 422	710 758 746 752 743	811 848 856 821 825	450 452 410		399 389 372	357	474 660		44 44 46 46		f	7/50 7/50 6/50 6/50 7/50	L1 L1 L1	BMS BMS BMS
1528		383	418	774	821	431	403	386	387	588	680	ā6			6/50	Ll	вмѕ

Table 11. Yellowfin from the Western Equatorial Pacific: Western Carolines

Total Length	Weight	Head Length	Shout to Ins.	Snout to Ins. End Dorsal	Spout to Ins. Anal	Spout to Ins.	Ins. Ventrals to Ant. Edge Vent	Greater Body Depth	Length Pectoral	Height 2nd Dorsal	Heighu Anal	Diameter Ints	No. Gill Rakers	Sex	Wonth and Year	Gear	Ezamîner
664 677 753 845 945	12	209 220	208 211 235 252 271	359 366 405 441 485	391 406 435 483 534	205 213 232 243 274	190 188 217 237 257	171 192 197	201 206 236 248 289	93 99 118 139 165	98 92 120 159 183	30 30 33 32 34	9/21	f	12/50 12/50 12/50 12/50 12/50 3/51	II II II II	KE KE KE TO
958 975 1128 1160 1203	34 31	243 260 283 300 304	281 288 319 328 332	484 502 559 584 603	666	272 283 326 335 342	537 308 341	230 257 271	319 289 336 331 335	200 198 248 283 273	250 242 297 325 341	35 36 37 37 39	10,420		12/50 12/50 12/50 12/50 12/50	L1 L1 L1 L1 L1	KE KE KE KE
1211 1241 1258 1279 1283		301 316 307 319 325	338 349 343 342 353	603 632 600 640 643	688 697 693 711 719	337 360 339 367 370	346 348 369 345 353	301 319	342 336 357 354 359	316 366 386 335 395	340 430 441 386 429	37 42 41 38 41			12/50 12/50 12/50 12/50 12/50	L1 L1 L1 L1	KE KE KE
1293 1372		315 336		653 687		367 401	369 392			ı	441 591	41 39			12/50 12/50	L1 L1	KE KE

Table 12. Yellowfin from the North Central Pacific: Hawaiian Islands

241	.49	67	76	133		76	69	56	49	20		14	9\$20	12/51	Pl.	HY
250	.62	76	81	140	150	83		62	53	21	20	15	9,421	11/49	Tr	HLM
253	.62	70	78	136	157	81	77		55	23	19	15	8/20	12/51	Pl	HY
255	。62	71	79	139	158	81	76	64	56	23	20	14	11,620	12/51	Pl	HY
259	。65	72	81	142	160	83	81	66	54	21	20	15	11/21	12/51	Pl	HY
														'		
260	。60	72	78	136					58	23		15	9/22	12/51	Pl	HY
260	65ء	73	81	145	160	82	79	63	59	22	21	15	9/20	12/51	Pl	HY
262	。68	70	82	145	158	79	77	68	56	20	20	14	10/20	12/51	Pl	HY
262	.67	73	82	143	163	82	83		57	22	20	15	ĺ	12/51	Pl	HX
264	。73	72	83	146	166	84	86	68	57	24	20	15	10/22	12/51	Pl	HY
									نــــــــــــــــــــــــــــــــــــــ				<i>'</i>	1 '		

Table 12 Yellowfin from the North Central Pacifics Hawaiian Islands (Continued)

																	magn meligina page.
Total Length	Weight	Head Length	Smout to Ins.	Sacut to Ins. 201 Dorsal	Snowt to Ins. Anal	Snoat to Ins.	Ins. Ventrals to Ant. Edge Vent	Greatest Body Depth	Length Pestoral	Haight 2nd Dorsal	Height Anal	Diameter Iria	No. Gill Rakers	Sex	Month and Year	Gray	Examines
265 265 269 271 274	.71 .74 .73 .76	71 74 73 76 76	83 85 83 83 85		166	84 83 84 88	81 81 82 84 77	67 68 71 72	57 57 65 66	24 22 25 26 27	20 22 21 23 22	15 15 14 15 15	8/22 9/21 9/22 9/22 8/21		12/51 12/51 12/51 12/51 12/51	Pl Pl Pl Pl Pl	HY III HY HY
282 284 286 294 350	.90 .96 .98 1.8	79 78 79 83 101	87 89 89 92 111	152 159 157 165 194	177 182	91 89 89 94 112	81 89 87 88 107	70 73 76 74 94	66 65 67 70 92	28 26 26 25 36	25 21 25 22 32	15 16 16 16 19	8/21 8/21 9/22 9/22		9/51 12/51 12/51 9/51 12/51	Tr Pl Pl Tr Pl	WMM III HY TH III
364 386 5∪o 517 518	2,5	105 111 146 150 151	116 126 158 170 162	202 218 270 280 287	239	166 172	147 151	127 132	98 103 147 146 124	40 66 60 55	33 30 64 53 52	18 20 25 26 26	10/21 9/21 10/21 9/22 10/21	m f f	12/49 12/51 7/50 5/50 5/51	Tr Pl Tr Tr	HY KY KY WMM
527 535 542 553 596	6 6 7 7	151 150 156 161 188	168 172 177 178 209	293 296 300 306 344	324 328 330 338 375	173 178	159 155 161	137 139 140	167 163 161 154 187	64 61 63 66 68	66 62 56 69 67	26 26 26 28 27	8/20 10/21 10/22 9/20	m	9/51 9/51 9/51 9/51 9/51	Pî Pl Pl Pl Tr	TO HY TO RS
608 609 631 632 673	7월 9일	207 197 187 187 195	217 205 193	356 345 344		216 215 211	188 186 177	157	199 172 180	76 79	74	27 28 30 32 34	9/21 9/22 10/21 8/20	f m f m	9/51 9/51 1/52 1/50 1,50	Pl Tr Tr	RS RS HY JWR JWR
734 748 813 848 928	15 4 29	199 206 219 229 245	247 255	401 438	443 482	235 250 261	221	181 209	222 225	107 118 110 127 152	125 112 121	31 32 30 33 33	8\$20	f f m	12/49 5/51 8/48 5/51 5/51	Tr Tr Tr	HHE
991 1136 1682	1	296	1	508 581 836	642	334	330	253 272 430	336	179 229		33 36 44	9/21 9/22	f m m	5/50 7/50 8/51	Tr Tr L1	KY KY III

Table 13. Yellowfin from the Northwestern Pacific: Japan

											ORDER TO						
Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins.	Snout to Ins. Ventral	Ins. Ventrals to Ant. Edge Vent	est Bo n	Length Pertoral	Helght Ani Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Seg	Month and Year	ीं हरें	Examinady
395 405 414 420 434	2.9 3.1 3.4	117 120 121	126 130 131 133 144	216 221 230 234 246	241 245 261 257 265	129 131 135 135		105 106 107 110 113		38 44 45 52 48	34 42 40 47	25 22 22 23	8/21 9/20 9/20 10/20 8/20		5/49 5/49 5/49 5/49 5/49	Pl Pl Pl Pl Pl	BMS BMS BMS BMS BMS
442 449 456 468 469	3.9 3.8 4.5	130 130 133	146 145 145 148 157	247 251 252 260 264	277 271 274 286 290	151 145 147 152 150		119 118 117 131 123	140 139	55 50 53 58 55	49 49 49 52 50	27 24 24 26 24	9≠20 9≠21 9≠20 10≠21 9≠20		5/49 5/49 5/49 5/49 5/49	P1 P1 P1 P1	BMS BMS BMS BMS BMS
470 502 511 519 551	5.3 5.9 6.2	147 154 150	168 165	264 277 290 286 306	285 301 311 312 333	166 170 166		122 128 134 137 145	154 152 163	53 64 60 66 68	51 59 53 63 69	23 27 28 28 28	9≠21 11≠19 10≠21 9≠21 11≠22		5/49 5/49 5/49 5/49 5/49	Pl Pl Pl Pl Pl	BMS BMS BMS BMS BMS
563 576 613 633 640	8.7 8 11		185 192 198	305 321 338 342 352	337 340 371 376 382	177 183 199 201 203		149 154 168 162	183 196 197	75 79 87 89 90	75 77 88 87 80	28 29 31 28 32	9/20 9/21 9/21 9/22 9/21		5/49 5/49 5/49 5/49 5/49	Pl Pl Pl Pl Pl	BMS BMS BMS BMS BMS
	13		209 214 213	374 379	401	212 209 220		172	190 204 213 213	90	90 93	28 32 28 34 33	11≠21 9≠20		5/49 5/49 5/49 5/49 5/49		BMS
709 715 739 785	20	199 209	223 218 231 238	387 396	419 438	240		189 181 203 202	222	113 99	100 115 103 125	31 30 35 28	10/20		1/49 5/49 5/49 5/49	L1 P1 P1 P1	BMS BMS BMS BMS

Table 13. Yellowfin from the Northwestern Pacifics $J_{\rm apan}$ (Continued)

							1	1	1			1	1	1	1)
Total Length	Weight	Head Length	Spout to Ins.	Snout to Ins.	Snout to Ins.	Snout to Ins.	Ins. Ventrals to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height And Dorsal	Height Anal	Diemeter Isis	No. Gill Rakers	Sex	Month and Year	Gear	Examiner
788 789 806 809 834	20 22 21 28 24	218 212 218 221 230	240 244 245 239 254		471 455 472 470 483	245 235 240 243 255		199 209 197 211 220	234 229 230 240 242	117 124 129 114 145	132 113	33 30 31 35 33	9/19 10/20 8/20 10/20 10/20		5/49 5/49 5/49 5/49 5/49	Pl Pl Pl Pl	BMS BMS BMS BMS BMS
835 849 859 875 883	24 26 29 24 26	226 230 234 239 267	258 256 255 255 265	444 457 457	487 484 497 512 508	253 258 268 268 265		213 217 238 211 217	238 249 267 257 269	139 137 150 164 158	152 150 161	30 33 32 36 32	9/20 9/20 8/19 11/20 9/20		5/49 5/49 5/49 5/49	Pl Pl Pl Pl	BMS BMS BMS BMS BMS
916 946 947 948 950	27 34 34 37 34	240 243 243 254 256	272 273 275 278 279	481 491 491 492 503	514 536 545 552 550	265 271 278 287 284		225 238 236 238 235	260 267 278 265 274	148 156 175 185 169		34 34 35 35 35	8/20 9/19 9/20 10/19 9/20		5/49 5/49 5/49 5/49 5/49	Pî Pl Pl Pl	BMS BMS
958 1065	32 48	251 272	283 301	498 547	537 603	273		227 268	265 304	153 184	164 204	33 36	9∮20 11∮22		5/49 5/49	Pl Pl	BMS BMS

Table 14. Yellowfin from the Northwestern Pacifics Southwestern Panay Islands, Philippines*

											Process of the same
Total Length	Head Length	Snout to Ins. 1st Dorsal	Snoot to lns, 2nd Dorsal	Snout to Ins. Aaal	Snout to Ins. Veniral	Total Length	Head Length	Spout to Ins. 1st Doresi	Snout to Ins. 2nd Dersal	Snout to Ins. Angl	Snout to Inst Ventra
491	146	164	286	318	168	568	165	185	320	362	188
504	155	185	329	351	173	568	169	188	336	360	193
504	156	185	320	350	173	569	169	192	320	357	188
504	157	185	325	346	179	571	165	188	332	356	185
508	155	178	320	347	180	571	167	193	327	365	186
511	151	172	299	321	170	574	169	189	326	359	188
515	154	174	298	325	174	577	164	190	325	363	185
518	158	170	338	361	176	578	163	189	324	362	186
519	152	166	300	325	167	578	164	192	325	366	184
519	155	173	311	321	176	578	166	188	319	362	185
520	142	161	275	313	161	581	163	189	339	364	186
520	152	174	308	326	174	582	168	190	330	370	193
520	157	177	304	330	177	582	170	206	337	373	191
525	152	175	310	328	172	586	171	198	336	368	193
525	170	188	342	369	190	587	170	189	336	372	199
526	163	185	342	365	185	587	174	190	340	366	195
531	154	174	302	331	175	590	180	212	344	365	200
536	159	182	312	335	174	591	168	196	338	365	188
537	159	174	302	330	174	591	171	189	329	368	194
538	156	178	303	329	175	594	172	190	325	372	193
539 541 542 542 544	155 156 156 156 156 158	179 178 175 180 182	305 305 308 309 311	365 329 330 331 333	175 176 175 171 173	596 597 598 599 603	176 170 175 174 174	203 193 198 192 184	346 332 338 341 336	384 371 372 363 373	203 190 189 197 198
549	159	182	309	342	180	603	177	201	346	373	191
550	159	171	309	337	170	604	173	194	334	378	194
5 55	162	182	315	360	184	604	174	206	344	372	194
559	160	185	322	353	184	605	180	203	351	383	208
562	168	188	328	350	188	607	182	205	355	387	205
563	165	182	324	363	185	608	175	197	344	373	193
565	161	180	322	353	180	609	177	199	339	377	200
566	152	168	300	345	175	610	181	202	344	385	200
566	168	184	325	350	184	614	176	198	344	381	194
567	160	186	329	354	182	617	173	201	345	380	199

^{*}From the Philippine Bureau of Fisheries

Table 14. Yellowfin from the Northwestern Pacifics Southwestern Panay Islands, Philippines * (Continued)

									1		
Total Length	Head Length	Snout to Ins. 1st Dorsal	Snout to Insnd Dorsal.	Sucut to Ims.	Snout to Ins. Ventral	Total Length	Hoad Length	Snout to Ins. Let Dorswi		Snout to Ins. Ansl	Smout to Ins. Ventral
620 622 623 624 625	179 173 182 181 179	200 198 206 208 209	366 349 350 364 361	385 386 391 400 396	201 200 203 201 201	648 650 651 651	192 186 185 185 186	211 204 208 210 202	368 366 368 361 360	403 400 403 397 395	208 210 205 208 211
626 628 630 630 630	178 199 178 180 187	208 208 207 205 209	360 384 371 353 370	394 415 388 393 402	202 204 206 200 204	651 651 651 651 651	186 186 189 191 191	209 216 211 214 219	374 380 377 373 373	409 407 407 408 418	214 212 214 219 217
630 631 631 634 635	188 179 186 190 184	205 203 210 209 209	360 351 360 365 364	394 387 388 405 401	212 199 208 214 203	652 653 653 654 655	190 186 195 191 190	218 202 206 209 208	371 364 360 363 356	411 414 400 417 400	211 209 210 214 215
636 638 638 639 639	178 187 189 176 190	205 210 211 204 215	362 363 370 365 375	391 400 403 390 410	200 203 212 197 216	655 655 657 657 657	190 194 187 188 194	221 207 213 208 213	390 370 367 365 374	405 405 400 420 411	214 217 208 214 216
640 642 642 643 643	185 187 188 185 186	205 206 214 205 201	359 374 365 368 562	400 395 403 404 406	210 215 218 216 218	660 660 660 660 661	189 189 190 194 191	214 215 223 220 217	379 380 382 374 371	406 405 413 408 411	219 220 214 219 210
644 644 645 645	186 191 192 180 183	210 221 214 201 209	362 375 366 373 363	401 411 401 400 406	209 219 217 209 206	661 662 665 666 668	191 186 184 189 188	221 212 220 220 211	382 364 388 380 372	409 400 423 409 407	219 206 222 214 212
645 645 645 646 647	184 186 186 185 193	217 212 215 212 204	373 365 369 359	401 402 416 396 405	212 208 216 208 214	668 668 669 669	189 191 194 189 194	219 216 206 217 209	371 368 366 368 369	405 414 411 410 404	207 218 214 210 214

^{*}From the Philippine Bureau of Fisheries

Table 14. Yellowfin from the Northwestern Pacific: Southwestern Panay Islands, Philippines* (Continued)

									1	·	9
Total Lengin	Head Length	Snout to Ins. 1st Dorsai	Snout to Ins, 2nd Dorgal	Snout to Ins. Anal	Snout te Inse Venutal	Total Length	Head Length	Spout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins Anal	Snout to Ins. Ventral
669	194	212	374	411	217	695	199	222	387	429	213
670	187	214	378	414	219	696	200	214	381	431	224
670	189	216	380	414	213	696	201	222	397	429	228
670	190	219	381	414	216	697	204	220	390	426	224
670	194	217	376	415	221	698	202	224	399	431	229
670	195	226	386	418	219	700	203	237	400	413	227
672	199	220	371	414	221	700	206	220	380	436	234
674	193	216	380	422	222	701	201	228	389	430	227
675	195	215	380	419	218	701	205	225	394	435	233
675	195	226	387	409	209	702	203	236	391	435	238
676	191	218	382	419	215	703	203	224	392	416	229
677	196	229	389	417	228	703	204	229	390	430	225
678	198	230	390	418	229	704	206	229	390	429	232
678	199	219	393	424	218	705	200	230	395	432	220
678	200	205	386	418	218	705	211	238	411	441	231
678	200	220	392	429	225	706	200	221	400	435	227
680	192	222	375	414	211	707	208	226	402	428	223
680	194	225	302	420	211	709	201	228	400	450	224
680	196	229	392	424	215	712	199	226	390	440	223
682	200	220	382	423	225	712	206	220	395	450	230
684	191	222	370	427	209	712	209	231	405	438	227
684	199	229	392	419	220	712	211	234	404	441	234
685	194	223	390	423	219	713	202	230	396	435	224
686	197	214	385	420	218	714	202	229	407	431	238
686	200	218	386	421	222	715	204	227	400	439	234
687	191	220	387	414	229	716	205	229	400	440	227
689	192	216	387	420	220	716	207	228	401	447	236
689	194	225	384	427	223	721	202	225	398	437	231
689	200	219	390	424	224	722	205	230	408	449	233
690	199	223	381	413	220	723	210	236	396	448	234
690	202	220	390	425	220	724	207	230	385	440	235
690	202	220	394	420	220	725	213	237	405	441	239
691	195	226	387	428	224	726	201	230	403	440	229
691	201	231	388	428	219	726	206	235	415	456	229
692	199	228	399	426	212	726	209	228	408	464	238

^{*}From the Philippine Bureau of Fisheries

Table 14. Yellowfin from the Northwestern Pacifics Southwestern Panay Islands, Philippines* (Continued)

						-			1		
lotal Length	Head Length	Sacit to In., lst Dorsal	Snout to Io., And Dersai		Smout to Ins. Ventral	Possel Length	Head Length	Spout to Irs. 1st Dorsal	Shout to Ibe And Donari	Sacut t. Ins. Anel	Snout & Lunding Table Table Table & Ta
728	210	217	394	440	230	804	221	244	443	499	251
733	208	225	414	448	232	804	225	257	446	487	253
734	205	228	401	440	242	806	227	249	451	493	259
736	212	248	436	467	256	808	227	239	450	482	238
737	213	243	424	456	238	816	221	253	445	503	254
739	206	233	420	452	240	816	221	259	451	490	255
743	204	230	414	453	232	818	238	263	454	500	257
744	212	239	116	457	239	820	224	254	451	495	255
746	208	248	418	463	237	820	229	250	477	504	264
750	211	231	411	455	240	820	235	273	478	504	260
750	216	246	428	465	238	822	223	254	451	494	256
755	206	227	395	454	230	822	237	266	450	505	265
756	211	230	418	470	232	824	229	2 63	453	502	257
759	210	252	417	452	238	824	237	259	455	490	260
759	215	238	432	471	242	825	230	257	466	503	268
765	215	244	420	468	250	825	233	255	457	502	259
765	222	248	427	460	243	826	229	265	451	494	250
771	218	240	424	468	246	827	231	259	461	501	256
774	221	245	438	474	253	830	222	265	462	494	255
775	212	235	427	472	238	831	230	255	454	494	258
778	220	249	434	469	242	837	234	256	452	505	263
780	220	239	428	470	239	838	232	260	460	510	264
782	218	246	438	474	248	840	231	259	459	511	264
783	220	255	441	475	248	843	227	263	465	502	261
784	221	247	435	474	250	845	230	267	466	515	277
785	225	247	429	474	250	851	229	260	453	519	254
785	226	253	439	489	254	851	231	255	465	506	258
786	225	252	438	478	255	852	238	268	470	520	269
788	222	241	436	473	258	858	234	254	464	510	265
789	219	260	440	483	244	859	229	266	463	512	269
795	224	248	437	487	239	860	234	259	474	528	267
796	225	246	446	475	248	864	230	265	473	521	261
800	224	252	435	481	249	868	242	274	473	524	269
801	219	244	439	494	252	871	233	267	479	520	273
802	231	258	463	489	252	875	239	274	474	516	264

^{*}From the Philippine Bureau of Fisheries

Table 14. Yellowfin from the Northwestern Pacific: Southwestern Panay Islands, Philippines* (Continued)

					_	A					
rotal Length	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins. Ventral	Total Lengen	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins. Ventral
877	249	278	484	535	274	1081	264	318	571	632	329
878	239	264	475	517	266	1094	282	315	559	632	322
880	235	260	469	515	266	1116	287	331	582	629	312
885	255	270	486	534	277	1138	300	327	594	652	327
886	246	280	486	539	274	1147	293	320	594	647	337
388	238	266	478	522	275	1148	294	335	597	654	339
888	248	263	490	531	276	1155	308	346	610	681	352
890	231	279	487	538	263	1162	302	326	613	672	342
894	243	278	484	522	270	1210	301	354	637	701	338
904	241	266	492	541	274	1214	325	354	647	729	363
906 912 912 914 916	256 242 246 243 245	284 265 268 272 281	492 486 478 489 500	532 528 554 542 552	278 268 276 280 280	1226 1231 1234 1239 1251	332 320 306 314 329	365 348 329 359 362	683 634 639 644 658	756 714 684 702	385 351 340 351 373
916	251	280	501	548	289	1251	332	367	684	744	369
918	242	285	510	552	275	1254	318	349	646	712	361
921	254	278	510	559	282	1258	328	360	666	732	370
924	238	268	511	567	276	1279	322	362	669	731	371
932	248	274	499	557	280	1281	337	384	685	745	384
932 933 942 944 951	251 255 258 249 258	280 282 280 283 290	487 511 514 519 521	544 561 577 568 576	280 299 291 294 288	1284 1294 1294 1314 1317	328 331 345 343 318	361 369 369 373 359	672 667 673 688 662	742 731 734 768 769	377 380 378 389
953	259	291	523	574	289	1329	342	384	696	766	376
954	265	286	517	564	294	1330	350	382	710	790	408
987	262	291	538	584	302	1336	321	377	672	739	378
1000	269	297	541	599	304	1345	349	360	693	772	405
1008	269	299	539	590	308	1346	340	364	674	756	405
1017	265	301	536	606	307	1354	344	381	692	762	390
1024	274	309	554	613	321	1372	349	395	714	774	392
1045	276	304	568	620	320	1373	341	372	694	767	387
1049	274	301	557	595	302	1397	342	383	620	780	383
1074	296	314	576	640	335	1415	368	392	725	793	412

 $[\]star$ From the Philippine Bureau of Fisheries

Table 14. Yellowfin from the Northwestern Pacifics Southwestern Panay Islands, Philippines (Continued)

rotal Length	774 CL	out 8. rsal	Snout to Ins. 2nd Dorsal	nout as. all	Smout to Ins. Ventzai	Total Length	Head Length	Smout he Ins. let Dorsal	Smont to Ins. And Dorsal	+2 ∷ • ⊬d	Spoot to Inso Venterl
1418	364	409	738	800	425	1488	382	437.	776	840	431
1422	367	418	727	790	3 8 5	1502	386	424	794	870	450
1484	377	418	774	821	419	1545	368	410	753	840	410

Table 15. Yellowfin from the Northwestern Pacifics Batangas Province, Luzon, Philippines*

				0 • = 1100 ;	,						
466	143	153	265	293	153	686	193	209	377		217
470	140	150	265	300	164	686	209	222	381	426	224
496	135	146	264	296	153	689	203	218	386	422	231
515	139	151	277	310	158	691	206	223	379	415	226
517	142	151	273	314	159	692	198	214	386	428	218
518	138	152	272	310	T60	698	211	224	398	437	233
618	188	203	350	385	207	702	205	217	387	424	227
625	181	202	348	397	206	704	204	218	391	428	224
633	192	207	358	391	204	704	209	228	393	437	226
638	194	202	353	387	213	706	210	222	396	444	235
								ļ			
648	194	212	371	412	205	708	205	223	393	436	224
656	195	212	360	408	214	711	206	214	396	435	229
660	191	210	375	410	220	714	204	230	397	438	218
670	192	206	361	411	211	714	207	223	401	432	228
670	195	213	376	413	219	714	212	223	393	431	226
											ļ
671	198	212	382	417	214	718	206	225	394	435	226
674	192	214	374	397	210	718	207	226	396	432	226
674	206	215	378	421	222	720	215	234	403	445	243
677	192	218	370	410	217	722	212	228	408	442	226
677	200	214	373	416	226	723	210	222	395	440	236
678	0.00	03.5		4.7.3							
680	202	215	380	414	223	724	210	225	402	444	239
681	203	222	387	428	223	726	225	222	397	434	233
683	192 206	216	379	415	221	728	209	223	405	443	229
684	1	221	383	433	226	733	208	229	405	448	238
	205	223	390	421	227	738	215	230	407	447	231

^{*}From the Philippine Bureau of Fisheries

Table 15. Yellowfin from the Northwestern Facific: Batangas Province, Luzon, Philippines* (Continued)

						rov contant arrest				g Tangang and and archer	and store of
Total Length	Head Length	Spout to Ins. let Dorsal	Snowt to lns, 2nd Dorsal	Snout to Ins. Anal	Snout to Ins. Ventral	Fotal Langth	Heal Length	Snout to Ins. 1st Dorsal	Shout to Ins. 2nd Dorsel	Shout to	Shout to
741	213	231	411	455	236	787	227	244	434	481	250
742	215	237	408	451	237	788	227	251	444	478	248
743	214	222	406	443	238	790	221	245	431	475	243
744	218	227	420	467	236	790	221	245	451	483	252
746	216	219	410	466	234	791	221	248	441	471	247
746	221	228	407	460	237	792	224	238	425	471	249
747	219	244	414	470	242	792	226	261	447	482	257
751	219	230	408	457	237	798	227	242	437	495	251
752	217	237	417	445	237	800	225	242	431	484	249
753	218	225	420	458	234	800	230	251	448	495	256
759	217	237	421	454	239	802	230	251	442	494	248
760	212	241	419	466	243	803	228	243	437	491	248
760	214	231	420	455	240	804	223	250	436	487	247
762	217	233	415	460	236	804	228	246	446	500	253
762	223	236	414	461	247	805	227	256	452	494	251
764	220	240	418	452	238	810	224	256	443	489	260
766	220	248	424	469	245	810	234	251	438	495	252
768	216	236	421	462	237	811	229	253	446	492	255
770	220	234	418	481	247	811	231	254	446	485	247
770	226	242	427	471	247	812	228	247	441	486	252
772	223	240	421	460	247	820	228	255	448	485	245
774	218	245	431	461	240	821	231	261	453	485	253
774	220	242	426	474	245	821	237	255	454	490	264
776	220	243	427	473	241	828	234	267	448	496	254
777	224	247	426	472	235	838	232	252	455	505	261
777	224	247	430	477	242	857	242	257	461	512	251
778	216	238	425	473	241	915	254	281	494	551	282
783	225	246	431	475	250	935	264	260	501	563	295
784	221	245	438	482	247	944	268	285	505	566	300
784	224	246	428	482	252	1118	290	315	568	622	330
785 787 787 787 787	224 219 222 224 225	247 245 239 252 245	433 432 436 436 427	468 473 478 471 476	241 234 247 241 246	 1155	293	328	579	643	338

^{*}From the Philippine Bureau of Fisheries

Table 16 Yellowfin from the Northwestern Pacific: Ragay Gulf, Bicol Peninsula, Luzon, Philippines*

Total Length	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins. Ventral
490	137	148	260	299	157
710	208	228	402	440	234
729	206	228	393	441	233
736	211	236	414	451	232
740	207	231	410	447	225
746	214	237	413	445	234
757	214	238	416	462	236
757	216	237	420	467	246
775	220	242	422	481	240
788	219	236	422	477	244

Total Length	Head Length	Snout to Ins. 1st Dorsel	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins. Ventwal
797	222	247	432	485	247
812	220	242	439	486	257
846	236	244	444	521	266
861	229	268	473	512	257
902	243	258	466	554	284

Table 17. Yellowfin from the Northwestern Pacific: South Sulu Sea, Philippines*

437	134	143	258	281	163
589	174	192	331	367	200

^{*}From the Philippine Bureau of Fisheries

Table 18. Yellowfin from the South Central Pacific: Marquesas Island (Frozen specimens measured in Honolulu)

Total Length	Weight	Head Length	Shout to Ins.	Shout to Ins 2nd Dousal	Snout to Tys.	Snout to Inc Ventral	Ins. Ventrals to Ant Edge Vent	Greatest Body Depth	Length Pestoral	Height 2nd Dorsal	Horght Anel	Diameter Iris	No. Gill Rakers	K võ	Month and Year	14 20 20 20	Br. offices
754 768 769 780 782	19분	218 216 218 224 216	240 245 235 240 248	414 422 409 418 421	455 450 455				247 237 232 237 208	97 120 135 148	125 121 149 137 148	33 30 3€ 3 3	10/22 8/21 10/20 11/20 11/20	f m m	4/40 4/49 4/49 4/49 4/49	Pl Pl Pl Pl Pl	FOJ KY FOJ KY
788 796 798 799 801	21½ 26 22 22 22 22½	225 227 226 224 225		426 432	472 476 470				241 253 251 256 241	139 144 124 138 123	129 152 128 167 134	35 33 34 33	9/20 10/21 9/20 12/21	f f m	1/49 1/49 4/49 4/49	Pl Pl Pl Pl Pl	LBS FCI MBS FCO MBS
801 807 821 903	22 1 2 2 2 2 2 2 2 5 30 2 2 3	229	240	444	435				239 249 261 267	149	173 147	53 35 34	10/21 9/21	m m	1/49 4/49 4/49 4/49	Pl Pl	FCC MRS FCC XY

Table 19. Yellowfin from the South Central Pacific: Society Islands (Frozen specimens measured in Honolulu)

496 497 504 510 513	6.0	150 146		281			148 140 141 154	62 56 56 65 62	56 49 56 64	26 25 25 26 27	9/21	1,	4/49 4/49 4/49 4/49	Pl Pl Pl	MBS FUU MBS MBS MBS
519 523 531 547 550	1		166	285 292 296 307 303	322		146 155 160 172 122	03 65 63 67 71	64 61 62 67 74	26 27 27 27 27	11/22 10/20	f m m	4/49 4/49 4/49 4/49 4/49	P1 P1	MBS FCJ FCC FCC
559 565 571 572 576	8.0 9.5 9.0	161	í	313 313 317 313 313	353 346		184 171 173 181 181	77 66 69 74 68	69 C8 71 74 70	27 27 29 28 27	10/22 8/19	m *	4/49 4/49 4/43 4/49	Pl Pl	FCJ FCC IFG MES FCG

Table 19 Yellowfin from the South Central Pacific: Society
Islands (Continued)
(Frozen specimens measured in Honolulu)

Total Length	Welght	Head Length	Snout to In3. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins.	Snout to Ins.	Ins. ventrals to Ant. Eige Vent	(I)	Length Pestoral	Height 2nd Dorsal	Heignt Anal	Dismeter Iris	No. Gill Rakers	Sex	Month and Year	Gear	Eraniner
582 599 602 623 638	9.5 10½ 10 11 12½	169 176 176 180	182 189 191 199 197	323 328 332 344 340	376 388				181 182 194 210 191	75 103 91	76 102 95	26 28 28 29 31	10/21 9/22 10/20 9/22	m m m m	4/49 4/49 4/49 4/49 4/49	Pl Pl Pl Pl Pl	FCJ FCC FCC MBS TFG
756 773 826 841 846	19년 19월 34년 25	214 216 221 228 231	236 236 246 246 252	413 404 441 448 451	450 454 497				253 245 263 281 256	122 132 150 134	166	31 32 33 33 32	9/20 10/21 9/20	m	4/49 4/49 4/49 4/49	Pl Pl Pl Pl	MBS MBS MBS MBS MBS
865 866 868 881 905	28	231 235 236 238 238	266	448 451 461 462 469	509 527				266 263 265 293 281	169 163 123 170 154	157 148 169	33 33 31 34 33	9/20	f m	4/49 4/49 4/49 4/49 4/49	P1 P1 P1 P1 P1	FCJ MBS FCJ FCJ MBS
1425 1427		358	379 390	700 713					373 376	427 476	497	42 41			4/49 4/49	Pl Pl	MBS MBS

Table 20. Bigeye from the Eastern Equatorial Pasifics 120° W. Longitude

																Mary and Property Comments	er.coractos
Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. End Dersal	Snout to Ins. Anal	Snout to Ins. Ventral	Ins. Ventrais to Ant Edge Vent	Greatest Body Depth	Leughh Pertoral	Heigh ind Dorsal	Helynt Angl	Diameter IIIs	No. Gill Rakere	ال الم	Mogic and Keam	. t. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	Horaka.
1101 1203 1220 1291 1291	85 100	361 389	340 373 368 392 390	607 673 639 705 695	680 727 700 773 782	389 408 399 428 424		352 357	390 389 348 359 359	181 172 217	222	44 48 48 48 51	11/16 8/18 8/19 9/18 7/20	f f m f	5/52 10/52 5/52 5/52 10/52	L1 L1 L1	III
1310 1311 1332 1339 1383	124	394 388 390 386 410	410 415 401 410 404	723 726 720 722 748	789 7 76 791 790 843	423 436 421	384 365 387 394 414		351 383 369	188 211 235	194 215 198	48 50 49 49 51	9/17 9/18 7/17 9/19 9/19	f f m m	5/52 5/52 5/52 5/52 10/52	Li Li Li	NAC
1407 1422 1445 1456 1471	130 143 145 148	425 433		749 788 767 786 805	829 8 63 849 872 896	463 473 487	413 405 421	404 426 417	388	218 220 252	224 233 23?	50 53 56 52 55	8/18 8/18 10/19 9/18 8/19	m f m m	5/52 10/52 11/52 10/52 10/52	Li Li Li	TSH TJR
1481 1485 1513 1547 1566	147 147	438 438 436 446 470	470 440 454 462 463	806	871 891 878 932 960	476 520 478 497 513	393 422 456	400 438 463		234 263 267 239 275	244 249	52 51 57 56 62	9/16 9/18 10/19 9/19 9/16	m m m £	10/52 10/53 5/32 5/62 11/52	II II II II	TUR TSH III III GIM
1589 1597 1600 1601 1603		456 471	485 477 469	848 860 863 861 871	942 953 965	503 528 531	448 470 472 450 455	452 469	398 396 421	289 274 278	286	57 58	10/19	m m	10/52 5/52 10/52 10/52 6/52	L1 L1 L1 L1	TSH
1610 1615 1624 1625 1633	200		488 475 485	870 866 860 867 873	946 943 959	522 521	441 468 455	446 470	388 385 390	267 239 255	260 280 252 262 259	54 58 60	9≯18 8≠18	m m	11/52 6/52 10/52 10/52 10/52	Li Li Li Li Li	III TJR GIM

Table 20. Bigeye from the Eastern Equatorial Pacifics 120° W. Longitude (Continued)

Total Length	Walght	Bead Lengih	Spout to Ins Lat Dorsal	Snout to Ins. End Dorsal	Snout to Ins. Anal	Snout to Inst	Ins. Ventrals to Ant. Edge Vent	Graetest Body Depta	Length P will	Height 2nd Dorsal	Heigh Ansl	Drametor Iras	No. Gill Rakers	res	Month and Year	Gost	Exanî ve j
1639 1639 1642 1657 1667	185	471		875 89 6	973 990 981 978 983	532 547 587 517 535	463 473 475 482 482	477 475 470	393	260	281	59 55 52 57 59	8/18 8/18 9/19 8/17 9/18	f m m m	10/52 10/52 10/52 5/52	L1 L1 L1 L1 L1	TSH TSH III GIM
1670 1672 1692 1701 1715		477 484 499	488 497 505	880 888 893 891 897	979 982 992 1006 1008	526 541 546	490 480 497	458 486	391 395 403	287 279	265 289 275 281 272	56 59 57 59 53	9/19 9/19 9/19 9/18 9/18	m m m m	10/52 5/52 10/52 10/52 10/52	L1 L1 L1 L1	TSH GIM
17.4 1754 1786 1835 1883	251	498 506 516 516 510	512 520 529 521	903 926 945 954 970	1030 1054 1069	562 567 579	492 507 510 534 518	523 526 515	417 423 399	292 277 283	285 257 266	63 59 60 60 61	10√18 8≠17 8≠18 8≠18 7√18	m m m	5/52 5/52 5/52 10/52 6/52	L1 L1 L1 L1 L1	III
1962		535	574	1025	1135	593	574	551	426	323	307	57	9718	m	5/52	Ll	III

Table 21. Bigeye from the Central Equatorial Pacifics $130^{\circ}~\text{W}_{\odot}$ Longitude

																1	
1010				572		337	293	291	318	137	147	45	9/19	m	11/52	Ll	TJR
1312				706	794	429	388	358	364	206	221	49	9-17	f	6/52	Ll	WVC
1456						476	432	411	396	232	230	54	9/19	m	11/52	Ll	TJR
1460				790		476	420	412	398	228	23?	57	8≠18	f	11/52	Ll	TJR
1480	142	438	426	797	886	486	413	391	378	215	214	58	8≠18	f	11/52	Li	TSH
													' '		'		
1512				825		497	404	408		227	234	63	8/18	f	11/52	Ll	TSH
1584						507	473	455	385	248	237	56	. / ,		. , .		GIM
1603				875	954	509	462	466	401	263	245		10/19	f			III
1635					970	527	479	438	410	284	277	60			11/52		TSH
1660	186	484	481	885	1030	556	482	469	392	275	214	63	9/19	m	11/52		TSH
		ļ	<u> </u>										1 7 - 0		,,	-	

Table 21. Bigoye from the Central Equatorial Pacifics 130° W. Longitude (Continued)

Total Length	Weight.	Head Length	Shout to Ins.	Snout to Ins. End Dorsal	Snout to Ins. Anal	Snout to Inse	Inc. Ventrols to ant Elec Vent	droglert Body Depth	Length Pectoral	Melgbt 2nd Dorsel	Height Ansl.	Diameter Iris	No. Gill Rakers	35.	Mosth and Year	\$ 60 PM	Brundnen
1663 1741 1751 1753 1886 1888 1925	229 233 260 305	470 474 502 504 543 528 532	494 500 504 516 534 542 554	883 914 908 925 1005 975 995	1113	523 527 557 567 594 592 587	490 503 486 497 553 540 527	474 475 476 490 523 521 515	376 426 421 400 429 424 409	255 269 288 300 314 291 298	263 256 286 275 389 287 309	62 66 66 65 60 65	9/19 8/18 9/19 8/19 9/18	m m m m	6/52 11/52 11/52 11/52 11/52 6/52	L1 L1 L1 L1 L1 L1	III TJR TJR GIL GIN III

Table 22. Bigeye from the Central Equatorial Pacific: 140° W. Longitude

1328 1371 1391 1467 1504		383 407 406 425 433	399 417 421 437 447	717 743 756 780 801	797 3 31 345 359 900	458 451 473		378 399 429	371 370 369	238 210 235	217 237 244	50 51 54 68 55	10/19 8/18 8/19	f m m m	9/52 8 /52 9/52 8/52 9/52	L1 L1 L1 L1	RS WMM WFR WMM
1510 1516 1540 1546 1573		445 430 452 453 467	447 448 451 473 479	799 798 809 853 852	908 395 329 334		437 434 442 460	422 436 449	397 390 379	242	242 241 237	54 55 46 67 56	9/18 8/18 8/17	f m m f m	8/52 9/52 9/52 9/52 9/52	L1 L1 L1 L1	WMM RS DLM WFE DLM
1575 1578 1586 1591 1596		454 456 457 449 452	483 477 477 479 484	854 855 856 851 869	943 938 948 923 954	510 510 505 493 502	455	466 466	3 84.	250 245 239	241 232 246	62 54 55 67 65	10≠18 9≠19	f f m m	8 /52 8 /52 9 /52 8 /52 9 /52	L1 L1 L1	DLM RS WMM WFR WFR
1599 1603 1616 1623 1660	212	461 470 470 468 479	467 484 470 465 487	857 8 76 8 75 858 883	956 978 962 954 984	508 525 528 514 535	474 476 460 469 475	453 475 458	369 406 382	246 268 269 254 265	262 255 262	53 55 60 56 62	8 ≠ 18 9 ≠ 19 9 ≠ 18 9 ≠ 18	f f f m	9/52 9/52 9/52 9/52 8/52	L1 L1 L1 L1	DLM WMM RS WMM

Table 22. Bigeye frin the Central Equatorial Pacifics 140° W. Longitude (Continued)

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Sneat to Ins. Wentral	Ins. Ventrals to Ant. Edge Vent	Greatest Body Daptr	Length Pe toral	Hergas and Dorsel	Height Anal	Dlameter Isla	No. Gill Rakari	Sex	Month and Year	Gear	Ersaluser
1688 1692 1692 1704 1714	233 230	471 498 474 490 496	484 523 504 519 523	873 915 901 904 909	965 1017 1001 1000 1011	520 546 529 543 559	474 495 498 481 473	480 498 485	391 388 394 395 380	262 281 265 254 269	256 267 268 255 286	58 57 57 69 62	10∮19 9∮18 8∮18	m m m f m	9/52 9/52 8/52 9/52 6/52	L1 L1 L1 L1 L1	DLM WMM RS WFR JEK
1724 1739 1740 1764 1817		490 497 506 490 585	505 519 539 502 516	909 935 950 935 937	1018 1035 1046 1039 1044	550 566 557 543 568	488 531 513 514 503	524 500 493	414 388 394 374 418	239 272 248 274 292	242 279 244 256 274	55 58 62 56 62	9∮18 8∮19 10∮18 8∮19	m m m m	9/52 9/52 8/52 9/52 9/52	L1 L1 L1 L1	WMM DLM RS WMM DLM

Table 23. Bigeye from the Central Equatorial Pacifics
Eastern Line Islands

547 880 884 919 973	34 40 47	160 271 275 288 299	275 285 298	302 488 500 515 548	550 548 580		251 262		315 367 357	121 126 127	117 124 122	29 43 41 41 40	11,≰20 8,≰19	m f m f	10/52 9/51 9/52 9/51 9/51	L1 L1 L1 L1 L1	TC WMM III III
1057 1080 1096 1138 1147	56 65 65 73	1 1	342 350 358	575 600 609 630	644 664 685 704 696	383 400	316 318 329	304 321 338	372 352 363 351 374	170	160 185	42 43 48 46 48	10∮18	f m m m	9/51 1/52 9/51 9/51 1/52	L1 L1	TO TC TC RS
1192 1192 1205 1206 1218	80 80 85 85	366	379 361 372 376 376	652 651 655 674 677	721 734 742 730 750	404 422 406	341 335	326 366 339	336 377 353	194 203 186 205 176	194 184 199	49 49 54 46 51	9,≠19	m f m m	1/52 9/51 9/51 1/52 1/52	Li Li	RS III TC RS RS

Table 28. Inga from the Jan. The Lattern Lattern Combines:

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins.	Snout to Ins.	Ins. Ventrals to Ant. Edge Vent	est Body 5	Length Pestoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rahers	Sex	Worth out Year	J. 1968.	
1237 1240 1270 1272 1290	91 95	375 331 376 381 386	332 395 336 339 387	670 671 692 704	756 7 55 7 56 7 93 790	424 426 426 430	356 372 376	755 762 385	734 566 540 374 344	195 215 203 192	193 213 197 230 196	51 50 58 52	9,417	क प्राच्या	0/51 11/50 11/52 1/52	12 1 1 1 1 1	III TAY TAY TAY TAY
1295 1296 1302 1312 1314	104 104 113 110 108	390 385		693 733 721 719 713	782 809 787 805 817	438 434 430 476 439	379 386 368 361 393	379 368 370 370 355	372 353 354 273 348	208 205 202 186 197		48 59 49 50 50	10,418	m f f n m	8/51 2/62 1/52 8/51 5/53	11 11 11 11	III PS TC III III
1339 1346 1347 1350 1375	125 116 112 120 125	396 406 403 402 397		721 724 730 749 741	815 810 820 826 831	459 467 466 453 446	393 373 388 391 398	397 375 401 394 336	356 382 352 361 381	220 212 218 229 208	223 209 220 214 217	51 51 55 55 55	97/18	m m m m	9/51 8/51 8/51 1/52	Ll Ll	III III EDS TO TO
1375 1376 1389 1389	125 125 125 135 135	403 398 404 404 410	411 419 411 408 415	742 750 743 747 751	835 828 345 838 846	468 448 479 463 466	400 391 398 404 410	401 201 378 392	356 369 366 366 336	221 221 207 227 213	218 233 213 211 216	89 54 59 55 55 54 55 55	9/18	in f m	9/51 2/50 8/51 8/51	Li Li Li	III RS III III
1408 1426 1434 1443 1447		404 417 433	433 431 441	756 788 789 780	858 867 877	464	418 410	406 421 406 426 407	367 366	2 2 2 2 2 2 2 2 5 6 2 5 6 2 5 6 2 5 6 2 5 6 2 5 6 2 5 6 2 5 6 2 5 6 2 6 2	232 224	52 55 55 50 50	9/19 3/13 8/13	m m m f m	9/51 9/52 1/52 9/51 10/52	LI LI LI	DI MAM O O DI DI
1447 1462 1465 1477	158 150	430 431	444	778 803 792 788	889 889	487 478 490 518	424 400 423 441	412 422 416 440	363 370	222 229 241 228	221 229 236 228	41 59 53 53	9/18	f f m	9/5 <u>1</u> 2/52 9/51 8/51		TO TO TO

Table 23. Bigeye from the Central Equatorial Pacifics Eastern Line Islands (Continued)

					1	1											
Total Length	Weight	Head Leagth	Spout to Ins. Ist Dorsal.	Snout to Ins. End Dorsal	Snout to Ins.	Scout to Ins. Ventral	Inst Ventrals or Ant. Edge Vent	డ్మాలకృత్తం గెంటిళ వైద్యక్ష్మ	Longin Pactural	Helgh and Done	Height Anal	Daama, ted Ini.	No Gill Rakers	ا می می	Month and Icae	Goak	Erom asy
1492 1494 1495 1506 1509	184	430 433 445 440 443	422 465 462 452 463	794 813 817 803 828	896 905 910 910 911	471 476 504 502 496	440 434 426 445	399 415 425 433 422	400 384	245 226 228 246 227	227 237 224 228 259	53 62 55	8≠18 8≠18 10≠17	î m f m	9/52 8/52 10/50 11/50	Li Li Li Li Li	ı
1517 1520 1526 1533 1535	165 168	1	450 468 431 440 473	798 821 811 812 829	903 913 919 928 932	488 500 501 524 527	445 429 447 432	443 457 432 430 420	380 390 382	235 254 237 252 232	249 265 234 232 235	56 49 53 58	8≠19 9≠18	m m m m	9/52 8/58 10/50 9/51 9/51	Li Li Li Li Li	DLM RS FCC EDS III
1545 1545 1546 1553 1555	165 172 157	457 452 451 446 464	463 463 445 458 468	821 833 822 831 825	930 933 918 941 947	513 539 505 495 525	442 437 428 468 465	448 445 422 443 454		250 212 261 253 245	246 229 250 251 244	56 53 55 59 62	8≠ 1 9	f f m f	8/51 8/51 9/51 9/52 9/51	L1 L1 L1 L1 L1	III III TC WMM III
1558 1559 1568 1570 1575	180 193	456 448 466 450 450	465 453 463 455 472	835 839 839 831 845	936 928 940 923 943	527 510 538 509 505	455 452 431 451 466	444 427 447 471 443	366 375 375	260 242 266 265 241	235 242 247 234 266	56 50 57 56	9/20	f m f m	9/51 11/50 8/51 9/51 9/52	L1 L1 L1 L1	DHB III TC DLM
1576 1582 1587 1588 1600	190	453 461	479 466	835 853	928 946	506	449 450 469	445 448	411	269 260 257	263 267 279	60 56 55 56 58	9/18	m m	8/51 9/52 10/52 10/52 9/52	Ll	III DLM III III DLM
1602 1604 1605 1606 1620	188 203	453 458 474	470	860 853	959 950 953	505 514 527	487 454	412 455 456	367 370	259 255		55 57 59 44		m m m m	8/51 11/50 9/51 8/52 8/51	L1 L1 L1	III DHB III RS III

Table 23. Bigeye from the Central Equatories Pacifics Eastern Line Islands (Continued)

Total Length	Weight	Heal Length	Snout to Ins. Lst Dorsal	Drout to Ins	Shout t Ins Andl	Ventral	In. Ventrals to	Greath is Body Depth	Leagla Fellomal	Height Finf Dorsel	Right Anol	Diameter Int	No. Gill Rayers	× 60	Morte ratiform	5	
1625 1630 1634 1642 1645	190 200 198	478	492 478 480 494 493	882 875 865 878 900	978 973 970 964 987	544 537 544 520 547	490 46 3 455	457 454	374	262 238 273 272 264	238 249 273 264 259	58 60 77 55		m f m f	8/51 9/51 3/51 8/52 9/51	L. L. L. L	III IC III WFE III
1651 1660 1661 1661 1668		477 487 478	487 483 502 489 479	876 891 880 883 881	985 985 984 995 999	539 551	477 478 478	463 481 494 475 465	402 410	277 281 275 231 261	215 262 274 246 261	60 55 57 51 56	97418	f f m f m	9/51 9/51 9/52 9/51 9/51	Li Li Li Li Li	III DLM III III
1673 1690 1692 1699 1700	232 229 245	484	483 489 503 513 510	878 884 889 907 916	998 1005 996 1008 1001	558 539 554	481 485 482 485 481	483 480 484 497 474	406 382	277 283 256 305 248	273 277 242 275 247	56 62 60 56 68	s ⊭ 19	m m n m	9/51 9/51 9/62 9/62 8/52	L1 L1 L.	TC IC DLM ZIC WY
1710 1713 1715 1720 1721	228 239 230	,	487 507 488 492 494	902 898 899 912 905	1008 1012 1009 1012 1021	559 541 544 533 562	490 500 485 509 496	465 477 457 499 471	392 394 414	267 276 255 287 287		54 61 61 55 56	9≠18 9≠18	m m m m	8/83 9/82 9/52 9/51 9/51	Li Li Li Li	III DIM NMM III III
1726 1727 1732 1735 1743	242 251	500 509 479		918 921 918	1013 1020 1048 1019 1040	546 574 540	483 509 510	491 492	400	268 274 263	269 245	69 67 55		m m m m	8/52 8/52 9/51 11/50 9/51	L1 L1	WFR WFR III DHB TC
1746 1753 1755 1757 1761	263 267		504 511	923 965 913	1025 1043 1039 1036	592 601	509 526 472	521 518	396 414 407	282 283 259 274 280	267 282 265	57 60 58 57 59	9,≰19 8,≰18	m m f f	9/51 9/51 10/52 9/51 9/52		III III TC III DLM

Table 23. Bigeye from the Central Equatorial Pacifics Eastern Line Islands (Continued)

Total Length	Weight	Head Length	Snout to Ins.	Snout to Ins. Ead Dorsal	Shout so Ins.	Sacus to Ins. Venitzi	Ing Ventrals to Ant Bigs Year	President Body Depth	Length P. Soral	Relation 201 Dural	Relg: Anal	Diameter It.	N., Gill Rakes:		Wonth and Year	Geor.	Skantry -
1767 1768 1773 1788 1796	261 257 264	515 501 509 507 502	523 512 528 512 530	932	1073 1049 1054 1056 1060	584 547 576 569 554	521 528 510 520 533	507 509		311 274 281 206 266	309 271 281 295 264	60 56 54 57 67	10≠18	m m m m	9/51 9/52 9/51 9/51 8/52	LI LI LI	III DLM TC TC WFR
1826 1827 1838 1841 1851	275 255 260	526 517 506 510 512	535 547 523 52 8 520	975 959 970	1082 1064 1065 1081 1058	584 560 559 565 560	532 523 537 535 535	510 490 528	439 405 387 410	319 274 297 219 270	321 303 289 258 269	63 68 58 62 58	8∤18 8∤18 9∤18	m m m m	9/52 8/52 10/52 8/52 10/52	L1 L1 L1 L1	WFR
1851 1909	288 298	533 527	549 529	990 9 6 8	1110 1102		521 540		421 403	289 286		56 61	8 <i>∮</i> 18	m m	9/51 10/52	Ll	III

Table 24. Bigeye from the Central Equatorial Pacifics
Western Line Islands

858 1158 1368 1368 1372	83	269 351 402 410 409	354 406	494 634 732 743 746	398 8 28	463	330 386 393	339 389 395	395 384	205 220 20 3	208 238 210	46	9∮18	f m m m	11/50 2/53 11/50 11/50 11/50		DHB SM FCC FCC DHB
1471 1488 1524 1922		432 441 431 524	427 443 431 524	780 808 816 962	897 904	498 496 502 599	435 436	422 420	376 379 374 428	211 253	220 225		8 ≠ 18	m f m m	11/50 11/50 11/50 11/50	Ll	FCC

Table 25. Bigeye from the Central Equatorial Pacifics Phoenix Islands

1452 1492 1723	141 160 245	422 423 472	440 441 485	79 <u>1</u> 794 906	876 877 1013	470 462 522	421 439 518	406 413 487	347 359 393	223 248 258	218 235 265	52 54 53	8≠18 8≠18	î î m	3/52 11/52 11/52	Ll	TO TO
1492 1723	160	423 472	441 485	794 906	877 1013	4 6 2 522	4 3 9 518	413	3 59	248 258	235 265	54 53	8/18 8/18	r m	11/52 11/52		

Table 26. Bigsye from the Western Equatoria. Pasific: Eastern Marshalls

Total Length	Jeight	-3	Snout to Ins. 1st Dorsal	Smout to Invo	onest to Ins. Ane!	Snow, to Imma Vertral	L. Ventral to Agt. Edge Vent	ರ್ಟೇಖಗಾರ Bರವೊಳ ೧೯೯೮	La gill Pestorau	Height ind Dorsal	Height Andl	Dispeter Irrs	No. Gill Bakers	ં	Section Control	Meiras	Both news
1352 1431 1492 1510	137 173	400 422 429 427	412 433 452 447		324 872 837 889	448 466 481 459	433	387 405 400 428	367 372 379 361	224 244 251 241	231 255 246 244	54 52 58 58	9≠19 9≠17 8≠17 10≠19	m m m	2/52 2/52 2/52 2/52 2/52	L1 L1	RS TO GIM GIM

Table 27. Bigeye from the Western Equatorial Pacifics Western Marshalls

379 398 410 421 423	2.8 3.0 2.9	122 122 128	139	228 233 241	241 255 257 270 274	136 130 144	126 124 129	112 115	117 131 137 131 131 129	3 4 3 5 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3	31 37 41 40 41	21 24 25 25 25	9≠18 8≠19 8≠18 8≠18 9≠17		8/51 9/51 9/51 8/51 10/51	Pi Pi Pi Li Li	
439 445 454 455 456	4.2 3.3 4.0	137 137 138	150 154 151	253 260 257	271 277 288 285 294			129 125 124	146 156 150	49 49 48 47 52	41 42 46 45 45	26 27 26 26 26	8/17 8/18 8/18 8/20		7/51 7/51 7/51 7/51 8/51	Ll Ll	WVC
459 470 486 487 512	4.8 5.3 5.3	148 151	155 165	268 282	290 296 302 309 323	165 166 161	144 150	137 143 142	164 165 171	50 51 56 52 58	47 45 51 48 54	26 28 28 28 29	9/18 9/18 9/13 9/18 8/18		10/51 8/51 7/52 8/51 7/51	L1 L1 L1 L1	MAC MAC MAC MAC MAC
536 538 545 553 561	7.4	171 166 164		302	338 341 351 352 357	192 188 196	165	156 159 161	221 191 199	69 67 61 66 67	61 62 62 61	30 32 30 33 32	8/19 8/17 9/18 9/19 10/19	f	7/51 7/51 7/51 7/51 7/51	L1 L2 L1 L1 L1	MAC MAC
561 563 568 569 588	9	175 175 175	190 190	327 323 326 327 342	364 362 358 361 379	200 196 193 199 213	169 173 169	155 160 166	183 212 201 221 234	68 72 69 69	62 68 61 66 70	5 3 3 5 5 5 3 5 5 5	9≠18 8≠18 9≠18 8≠18 9≠18	f	7/61 5/51 7/51 7/61 7/61	Li Li Li Li	WVC TO WVG WVU WVC

Table 27. Bigeye from the Western Equatorial Pacifical Western Marshalls (Continued)

													-				
Total Length	Weight	Head Length	Shout to Ins. 1st Dorsal	Snowt to Ins.) 12 1	Snout to Ins. Ventral	Ins. Ventrals to Aut. Eige Vent	88 0 H	Length Pertoral	Halges And Dorsal	Halght Anai	Drameter Irr	No. Gall Raker	30.1	Morte and Year	Gea∴	Tranîder
589 600 625 660 662	103/4	188 188 197 207 206	200 201 209 225 217	337 342 361 385 382	377 381 398 419 428	221 228	185 190	179 178	230 236 236 262 260	78 79 87	68 70 74 84 83	34 35 34 35 35 35	8≠18 8≠18 8≠18	f f m f	7/51 7/51 5/51 5/51 5/51	L1 L1 L1 L1 L1	WVC WVC TO TO
664 695 710 722 733	14 16½	208 217 222 224 227	221 235 231 237 240	379 402 407 416 419	421 436 443 459 460	240 243 250	196 202 208 216 218	188 198 206 207 215	252 275 275 295 301	93 99	79 85 88 90 99	35 37 37 37 36	9≠18 9≠19 8≠18	f f m	7/51 7/51 2/51 5/51 5/51	L1 L1 L1	WVC WYC KE TO TO
761 784 805 807 809		230 240 245 248 250	242 249 261 259 268	434 442 458 451 477	480 482 508 496 499	271 272 273	232 216 247 239 235	210 216 234 231 239	325 215 336 340 358	100 111 112	99 97 101 105 116	38 39 40 41 43		m	5/51 2/51 2/51 2/51 2/51	Ll	TO KE KE KE
835 845 880 900 904		254 259 263 275 267	265 245 280 284 286	471 476 500 507 503	524 522 557 574 555		250 250 256 271 250		375 358 373 345 363	124 119 128	111	39 41 42 44 41		f	5/51 2/51 5/51 2/51 2/51	Ll	TO KE TO KE KE
913 921 943 949 958		270 275 286 286 280	290 296 303	510 513 529 537 526	584 595	304 342	270 261 271	262 270	345 352 366	133 145 138 143 141	135 141	40 42 45 43 44			2/51 2/51 2/51 2/51 2/51		KE KE KE KE
970 973 980 981 991		289 286 290 292 305	302 301 309 309 322	536 542 545 539 565	603 600 606	321 319 335 323 338	294 267 285	267 273 274	402 343	151 153 153 155 155	152 145	43 45 44 44 44			2/51 2/51 2/51 2/51 2/51		KE KE KE KE

Table 27. Bigeye from the Western Equatorial Pacifics Western Marshalls (Continued)

					7										and the same of th		_
Total Length	Weight	Head Length	Shout to Ins. Ist Dorsal	Spout to Ind. 2nd Dorsel	Shout to Ins.	Toout to Inc.	Ins. Vintrals to Aus. Eage Vent	Crostogit Body Desire		Beight had Doneau	Holgit Anal	Dismoter Iris	No. Gill Raker	530	Profession Xovr	ao	11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1
993 1033 1043 1090 1117		298 309 309 316 331	315 320 320 337 350	564 569 577 603 622	65 1 669	345	299 306 311	286 261 307	407	153 160	152 160	45 47 46 45 48		m	2/51 2/51 2/51 2/51 5/51 2/51	Lì	KA HE LH TO KE
1135 1165 1191 1214 1215		335 340 355 348 358	350 345 360 367 378	632 623 634 665 660	705 719 737 741 730	376 384 403 386 398	351 366 365	340 332 338 348 409	339 335 333 357 348		185 167 196	47 50 54 48 50			2/51 2/51 2/51 2/51 2/51		KE KE KE KE
1224 1231 1235 1 2 42 1251		350 366 362 365 358	373 375 376 383 379	669 673 666 679 685	743 748 750 752 750	393 412 418 410 398	346 340 352	354 339 347 349 370	344 348 354 385 341	191 190 195 212 194	199 204	48 52 51 51 49		en de la companya de	2/51 2/51 2/51 2/51 2/51		KE KE KE
1259 1260 1276 1277 1284		356 359 367 368 372	376 388 377 386 397	680 684 687 695 685	759 768 772 780 760	393 401 412 405 406	373 380	349 344 351 348 364	360 364 346 340 331	210 210 195 200 209	194 192 203 205 192	53 47 50 49 51			2/51 2/51 2/51 2/51 2/51		KE KE KE KE
1299 1313 1321 1325 1333		363 384 377 390 375		702 714 723 727 707	796 799 816	418 442	394 381 383 385 396	373	359 335 345	197 208 218 218 215	197 213 212	50 54 52 58 48			2/51 2/51 2/51 2/51 2/51		KE KE KE KE
1341 1344 1364 1365 1366		391 391 384 398 402	404	720 737 734 736 746	789 826 817	428 438 438	399 391 403 407 406	390 414 374	332 377 360 349 367	212	245 231 221	55 53 54 53 56			2/51 2/51 2/51 2/51 2/51		KE KE KE KE

Table 27. Bigeye from the Western Equatorial Pacific: Western Marshalls (Continued)

											·						
Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins.	Spout to Ins.	Smout to Ins.	Ins. Ventral to Ant. Edge Vent	Greatest Body Depth	Length Pattoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Montt and Year	G & & 2	五七月四年四十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十
1369 1374 1375 1379 1389		384 400 385 399 391	403 414 396 412 420	734 753 730 741 760	811 825 818 840 839	431 470	391 405	391	371 343 367 360 346	217 215 243 230 222	215 224 221 243 212	55 56 53 55 58			2/51 2/51 2/51 2/51 2/51		KE KE KE KE
1390 1409 1410 1429 1430		393 404 406 407 413	417 424 425 420 439	746 771 757 755 770	830 858 851 862 866	455 476 449	422 387 429	389 413 415	371 377 365 373 361	210 212 234 252 244	218 220 232 242 252	56 55 53 54 58			2/51 2/51 2/51 2/51 2/51		KE KE KE KE
1431 1442 1447 1450 1452		417 420 419 414 418	430 434 440 441 427	792 780 776 777 773	907 870 864 858 878	487 465 459	410 417 415		353 375 358 375 355	225 226 242 252 220	217 229	55 60 57 56 54			2/51 2/51 2/51 2/51 2/51		KE KE KE KE
1454 1456 1459 1465 1468		407 413 424 421 405	435 450 445 427 430	788 784 780 785 770	880 878 883 88 5 871	459 462 492 473 455	428 419 430	431 425	372 383 372 355 361	233 223 214 250 251	229 241 227 228 242	52 55 57 55 56			2/51 2/51 2/51 2,51 2/51		KE KE KE KE
1475 1479 1488 1489 1493		424		800	868 912 887 894 898	470 472 482	455 430 429	400 431		233	237 226 256	55 56 60 55 56	8 ≠ 18	nı	5/51 2/51 2/51 2/51 2/51	Ll	TO KE KE KE
1502 1503 1504 1514 1522	1	423 420 431 423 435	442 452 444	800 805 807 801 803	897 891 896 879 904	468 484 474	424 430	414 427	365 349 359 370 383	252 225 241	242	53 59 56 59 60			2/51 2/51 2/51 2/51 2/51		KE KE KE KE

Table 27. Bigeye from the Western Equatorial Pacifics Western Marshalls (Continued)

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Sneut to Ins.	Sacue to Ins.	Smout to Ins Ventral	Ins. Ventral to Ant. Edge Vent	Greatest Body Dop**	Length Pertoral	Height 2nd Dorsal	Height Anal	Diameter Itis	No. GILL Eakers	(/) (/)	Model son Year		
1542 1549 1558 1559 1566		427 438 423 434 446	447 438 472 460 459	801 802 827 831 839	917 909 915 923 916	493 481 480 494 477	452 453 445	438	368 366 396 388 390	245 226 239 250 235	243 229 258 266 246	55 56 53 53			2/51 2/51 2/51 2/51 2/51 2/51	Zilinia Biramani, Iranji	KE KE KE KE
1569 1576 1580 1602 1610		431 429 452 447 451	467	814 857 847 861 860	932 949 950 951 945	492 487 490 509 496	480 470 465	431 433	368 355 394 383 395	246 249 269 263 250	256 239 262 257 270	57 53 60 52 60	8≠18 8≠17	m m	2/51 2/51 5/51 2/51 7/51	L1 L1	KE KE TO KE WVC
1612 1617 1620 1629 1638	190 201 201	443 448 461 460 450	468 473 473 493 503	844 851 866 878 890	954 953 971 964 986	526 489 529 495 492	498	447 462 481 475 439	386 382 369 397 371	238 266 251 242 259	261 267 239 235 233	58 55 55 58 56	8≠18 7≠18 10≠20	m m m	2/51 5/51 2/51 7/51	L1 EL EA	KE TO KE WVC
1642 1655 1663 1685 1711	$222\frac{1}{4}$ 202 211 248	451 458 460 481 480	495 470 483 500 512	871 875 892 897 915	953 955 990 985 1018	485 503 517 523 528	463 498	500 459 479 477 506	378 388 388 379 381	257 279 277 271 235	262 248 255 253 249	60 57 56 61 58	8,≰17 8,≰18	m m m	7/51 5/53 5/51 5/51 8/51	L1 L1 L1 L1	WYC TO TO TO WYC
1721 1722 1737 1740 1757	237 $\frac{3}{4}$ 250 $\frac{1}{2}$	465	511 412	927	1015 1026	515	501 516 536	503		273	254 269	63 55 65 55 63	8/18 8/19 8/18 8/15	m f m m	7/51 10/51 5/51 7/51 9/51	Ll	WVC TO WVC WVC
1767 1780 1795 1804 1804	283 258 ¹ 293 ¹ / ₂	486 488 499	551 529 544	918 960 946 951 957	1058 1060	541 552 540	556 531 542	538 498 491	375 389 409	261 250 267	280 245 263	58 63 58 58 59	8/17 9/18 9/18 9/19 9/19	m m m m	7/51 10/51 10/51 10/51 10/51	Ll	MAG MAG MAG MAG MAG

Table 28. Bigeye from the Western Equatorial Pacifics Eastern Carolines

																	werter the gate.
Total Lengih	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anai	Snout to Inst	Ins. Ventral to Ant. Elge Vent	Gratest Buly Depri	Lengik Pertoral	Height 2nd Dorsal	Height Anal	Diameter Irls	No. Gill Rakers	Kes.	Month and Tear	Gear	Eraniner
492 501 513 515 521	7	158 156 158 163 163	168 169 173 168 172	291 294 296 294 298	314 320 331 328 333	165 164 169 183 184	153	137 140 149 146 144	186 173 209 194 194	56 58 61 61 65	55 50 58 58 61	27 29 30 30 31	8 \ 19	f	4/51 4/51 5/51 8/50 7/50	II II II	TO TO TO BMS BMS
535 537 546 554 567		164 172 172 172 179	173 182 181 191 191	304 308 312 320 323	344 346 345 351 357	188 192 186 188 200	168 166 157 170 163	150 156 143 159 163	199 221 224 219 196	68 63 69 69 70	62 62 62 66 63	31 33 34 36 33	8∤18 9∤17	f f	7/50 7/50 5/51 6/51 9/51	L1 L1 L1 L1 L1	BMS TO WVC
568 568 575 581 593	8.7 7.8 9 9.5	179 166 182 180 185	190 183 192 193 188	320 314 334 333 329	362 338 363 365 379	199 200	176 163 170 176 180	153 146 157 161 157	206 181 232 225 230	66 74 67 72 76	62 77 65 71 72	34 29 33 33 33 35	9≠19 9≠21 8≠18 9≠18 10≠19	f f f f	6/51 6/51 5/51 9/51 6/51	L1 L1 L1 L1 L1	MAC MAC MAC MAC
594 595 610 629 646		186 185 189 197 205	186 193 197 211 211	340 335 346 370 372	376 378 386 398 414	211 201 217	170 175 187 183 194	169 169 172 178 172	231 233 238 248 248	75 71 71 80 82	72 67 71 72 80	32 34 33 34 38	8≠18 8≠20 8≠18	f f	5/51 8/50 4/51 4/51 8/50	L1 L1 L1 L1 L1	TO BMS TO TO BMS
648 672 675 676 679		200 214 210 208 212	220 219 218	382 388	418 429 425 419 426	235 230 227	199 198 207 199 208	185 195 205	257 265 283	86	86	35 38 35 36 37	9∱18	f f m m	5/51 5/51 4/51 4/51 6/51	L1 L1 L1 L1 L1	TO TO TO WVC
686 695 701 705 707		214 217 223 219 221	220 240	397	427 429 445 448 448	237 244 241		199 211 202	311 295	96	85 84 91 93 87	36 36 38 38 35	10≠20 9≠18	m	4/51 4/51 2/51 2/51 4/51	L1 L1	TO TO KE KE TO

Table 28. Bigeye from the Western Equatorial Pacifics Eastern Carolines (Continued)

Total Length	Weight	Head Longth	Spout to Instant 1st Dorsel	Strut & Irs. She Dural	Sm at to Ios. Anal	Sreet to It	Ant Bir Vent		المناه والمال إدارة الما	Redept and Dodge	And Little Angli	Diameter Ich	No. Gill Rakora	Sox	Month and Tear	Cees	Braniner
730 747 751 751 754		232 232 232 232 231 234	242 231 245 242 248	421 418 431 429	460 464 479 472 180	250 257 267 260 255	218 220 218		295 314 314 314 312	98 103 100 107 97	98	37 38 37 39 38		ſ	5/51 2/51 8/50 2/51 2/51	L1	TO KE BMS KE KE
757 768 779 795 802		225 241 235 248 249	239 249 253 264 251		468 485 495 499 492	248 266 267 266 274	224 231 231	222	318 330 324 352 341	97 105 104 117 115	106 110	37 41 38 40 39	8,418 9,419	f m m	5/51 5/51 8/50 4/51 2/51	L1 L1 L1	IO 20 BMS TO KE
811 812 820 825 827		248 250 249 256 254	258 261 267 257 275	463 468 459	508 512 514 508 513	267 276 277 290 276	240 256 231	235 229 236 24-	347 329 372 335 316	122 110 119 123 120	105 116 116	40 41 41 40 40	8≠18 8≠18	m	5/51 6/51 2/51 8/50 4/51	L1 L1 L1	TO TO KE BMS TO
830 842 844 853 859		254 255 261 262 261	263 277 276 265 276	475 483 481	517 528 518 529 545	283 281 285 287 285	251 243 254	232 248 242 248 227	332 372 370 337 355	121 120 126 127 117	112 130	40 41 42 40 40	8/18	m m f	6/51 4/51 8/50 4/51 5/51	L1 L1 L1 L1	TO TO BMS TO TO
860 862 874 875 879	31	266	283 280	498 488	532 539 538 544 548	285 306 297	236 245 255	4_1		125 124 116	125 125 119 115 178	43 43 44 42 47	8/18 9/19	f m	4/51 4/51 8/50 5/51 2/51	Li Li Li Li	TO TO BMS TO KE
881 895 923 925 929		269 266 279 283 278	279 292	503 509 521	545 558 564 577 585	313	255 258 252		316 392 382 365 400		124 130 130	42 40 43 42 42	8≠18 8≠18	m m m m	5/51 4/51 4/51 4/51 4/51	Li Li Li Li Li	TO TO TO TO

Table 28. Bigeye from the Western Equatorial Pacifics Eastern Carolines (C. minued)

									The same of the same	ncmension i						Charles a sportable	
Total Length.	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins.	Snout to Ins.	Sneat to Ins. Ventral	Ins. Ventral for Ant. Edge Vent		Length Perlinal	Reight 2nd Dufnei	Hergit Angl	Diameter irla	Mus Gill Raker	Sax	Month and Year	Gear	Erguiver
931 932 935 941 949		284 283 283 275 290	295 297	525 525 523 521 529	588 591 574 583 591	318 314 320 320 322		270 272 265	387 362 402 354 288	128 150 142 155 145	133 145 136 135 145	42 45 43 40 43		m m	8/50 6/51 8/50 2/51 4/51	L1 L1 L1	BMS TO BMS KE TO
953 955 960 962 979		285 285 291 286 295	283	531 526 536 537 541	590 594 599 593 613	325 326 325 324 338	268 283 286	263 260 266 268	365 338 385 374 362	147 144 146 140 148	141 140 143 142 152	43 42 44 43 42		f f	4/51 2/51 2/51 8/50 4/51	L1 L1 L1	TO KE KE BMS TO
986 986 990 1000 1001		296 302 299 318 302	302 320 302 335 308	553	601 607 616 662 626	330 332 336 354 340	328	266 271 277 278	380 373 417 341 459	152 142 161 179 158	136 144 155 182 148	41 42 45 46 43	8 ≠ 18	m m m	4/51 2/51 4/51 8/50 6/51	L1 L1 L1 L1	TO KE TO BMS TO
1006 1011 1016 1022 1022		302 300 299 306 313	311 315 310 327 319	559 572	633 617 623 626 633	343 337 341 335 359	284 285 289	287 281 280 285 298	372 160 395 388 329	150 145 146 162 141	152 148 147 167 140	44 44 44 46 44	8≠18	m m	4/51 4/51 2/51 4/51 2/51	L1 L1	TO TO KE TO KE
1028 1033 1035 1037 1047		309 304 301 315 316	321 311 328	567 563 579	640 635	346 335	298 321 290	280	375	141 161 148	158 150	44 46 44 46 45		f m	4/51 2/51 8/50 4/51 5/51	Ll	TO KE BMS TO TO
1050 1054 1056 1060 1067		315 312 312 313 320	318 333	582	635 631 640 651 641	348 355	297 303 311		334 358 352 475 361	170 174 166	1	45 48 48 44 51		f f f	4/51 6/51 8/50 8/50 8/50	Ll	TO TO BMS BMS BMS

Table 28. Bigsye from the Western Equatorial Pacifics Eastern Carolines (Continued)

									ý		-		·				
Total Length	Weight	Head Length	Shout to Ins.		\$ \$4.	Shout to 18	Ins. Ventue: Te	166. T B's:		Hangal Danna	Hereban An	Distriction Int.	No. Gill Raters	# GO	More the and X	ධ්යක්ව	
1072 1075 1075 1081 1088		318 319 323 319 319		596 592 589 589 589	656 660 665 665 668	357 359 362 372 361	319 307 309 307 325	298	332 399 412 337 373	180 163 157 181 178	167 156 160 175 175	48 46 46 47 49		m m	8/50 4/51 6/51 8/50 8/50	L1 L1 L1 L1	BMS TO TO BMS BMS
1088 1096 1101 1102 1108		324 326 328 332 326	345	606 601	668 678 561 378	356 356 369 375 376	334 327 311 323 323		459 361 345 339 345	183 177 173 182 176	174 192 170 183 183	47 44 49 46 48		f	8 /50 4/51 8/50 8/50 8 /50	Li Li Li Li	BMS TO BMS BMS BMS
1112 1114 1121 1126 1127	66 64	334 332 322 328 341	351	620 599 626	673	371 375 360 371 388	330 325 322 334 347	311 318	341 346 341 365 351	175 171 177 170 201	175 138 169 167 191	48 49 46 47 50	8 ∤ 17	f	4/51 4/51 8/50 2/51 2/51	L1 L1 L1	TO TO BMS KE KE
1128 1134 1142 1145 1147	66 83	332 330 333 348 338	352 359	612 610 628 635 623	691 694 696 690 704	375 361 370 395 375	333 342 336 322 347	313 322	374 321 370 367 335	171 169 203 182 187	181 159 183 183 181	48 50 47 51 50		í f	8/50 4/51 5/51 8/50 4/51	L1 L1 L1 L1 L1	BMS TO TO BMS TO
1152 1156 1159 1160 1170		347	1	648 641		373		322 333	328 382 365	177 180 185	174	50 49 9 49 5		Í	2/51 2/51 2/51 2/51 5/51	Ll	KE KE KE TO
1182 1188 1188 1192 1195	93	,	363 359 376 359 360	658 673	724 737 721 730 734	402 397 373 380 384		334 332 340	336 335 345 345 325	191 193 193	182 180 186 178 195	52 51 51 49 51	8\$17	f	2/51 2/51 2/51 4/51 4/51	L1 L1	KE KE KE TO

Table 28. Bigeye from the Western Equatorial Pacifics
Eastern Carolines (Continued)

																	
Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins.	Snout to Ins. Ventral	Ins. Ventrals to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Doradl	Height Anal	Diameter Iria	No. Gill Rakers	Sex	Month and Year	Gea.	Examines
1197 1200 1213 1226 1233	7 4 95	346 346 354 361	367 358 362 381 378	652 642 658 665 671	726 730 727 755 741	380 407 391 410 408	359 330 352 362 354	330 332 355 342	331 342 339 343 377	198 196 188 186 202	205 177 180 201 205	53 48 53 52 51	8≠18 8≠18	f m	4/51 2/51 4/51 2/51 8/50	L1 L1	TO KE TO KE BMS
1235 1245 1249 1263 1264	86	358 365 361 366 363	378 372 370 394 372	683 663 671 698 675	756 769 765 761 774	400 403	364 370 382 377 368	316 348 355 365 373	350 364 332 352 353	204 205 186 199 232	205 190 194	51 50 50 49 50	8 ≠ 18	f f	4/51 2/51 4/51 4/51 2/51	L1 L1 L1	TO KE TO TO KE
1270 1274 1282 1294 1295	99	363 378 369 372 376	375 401 380 383 386	686 701 699 700 694	768 767 790 778 773	417 416 440 413 413	369 371 373 381 374	360 381 362 372 356	359 372 345 358 351	193 247 215 237 209		50 53 51 49 51	8 ∤ 18	f f m	2/51 4/51 4/51 2/51 4/51	L1 L1	KE TO TO KE TO
1297 1302 1307 1308 1314	114	377 387 393 386 381	402 390 388 411 393	708 697 704 706 698	782 795 785 796 790	429 418	391 379 382 393 399	381 379 362 390	345 347 343 346 357	194 223 213 227 202	201 220 219 216 202	54 56 57 53 54	8≠18	m f f	4/51 2/51 8/50 4/51 4/51	L1 L1 L1 L1	TO KE BMS TO TO
1316 1316 1318 1321 1321	122	390	395		795 800 798 810 793	425 442 443	367	363 390 364 371 388	349 365	215	225 210 213	51 52 56 54 54	8 ≠ 19	m	2/51 2/51 2/51 2/51 4/51	Ll	KE KE KE TO
1326 1329 1331 1337 1350	122	384 387 388 401 380	387 410 403 408 396	722 724 714 723 724	803 796 800 811 804	431 431 446	387 381 386 387 400	366 396	354 364 345 354 361	207 206 241	219 215	51 54 63 59 53	8≠18 8≠18	m m	4/51 8/50 8/50 8/50 4/51	L1 L1 L1 L1 L1	TO BMS BMS BMS TO

Table 28. Bigeye from the Western Equatorial Pacifics Eastern Carolines (Continued)

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Inc. End Dersal	Shout to Ins.	Shout to Int. Vertici	In Ventral &	Greatest Bur Door	Langth For oral	Iscard ini adgaran	Roight Appl	D aneter Irra	No. Gill Rakors	587	Month and Year	£ 7.0.15	Fellows (All Control of the Control
1361 1368 1375 1387 1391	130	407 394 397	414	730 715 740 746 753	811 806 814 829 8 29	424	378 401 407		372 369 345 367 389	239 221	233 229 231 217 220	55 57 55 53		m m m	4/51 8/50 4/51 4/51 4/51	L1 L1 L1 L1 L1	TO BMS TO TO
1392 1399 1400 1401 1415			418	756 760 766 752 767	355 348 846 841 852	436	427 432 411	388	373 756 304 345 363	271 239 217 242 242	209	56 57 56 58 53	8 , 418	m f m	2/51 4/51 4/51 8/50 4/51	L1 L1 L1 L1	KE TO TO BMS TO
1415 1419 1422 1423 1423	132	411 413 410 399 406	440 416 413 421 418	757 752 746 770 770	839 851 826 847 851	456 457 449 434 444	425 400 430		356 351 339 351 355	245 240 231 221 212		58 59 57 52 54	8 ≠ 18	m m	8/50 8/50 8/50 4/51 4/51	L1 L1 L1 L1 L1	BMS BMS BMS TO
1424 1435 1435 1435 1436	149 145 140 149	410 414 416	444 429 432 432 416	775 766 764 771 777	848 855 855 863 876	446 464 468	419 423 411	421 397 421	359 374 397 350 356	232 232 227 219 245	241 223 231	60 54 56 56 55	8≠18 8≠18 8≠18	m m f f	4/51 4/51 2/51 4/51 4/51	L1 L1 L1 L1	TO TO KE TO
1440 1443 1450 1459 1464	157	406 420	404 439 419 442 466	787		458 435 461	413 430 428	405 405	1		215 236 240	61 55 55 53 61	8 / 18	m m m	4/51 2/51 1/51 1/51 1/51	L1 L1 L1	TO KE TO TO KE
1467 1468 1468 1474 1483	141	423 419 427 424 406	430 449 432 439 420	783 788 789 784 777	878		437 436		337 378 368	218 227 260 250 255	227 246 243	59 57 55 58 54		m m m	5/51 4/51 4/51 7/50 2/51	L1 L1 L1 L1	TO TO TO BMS KE

Table 28 Bigeye from the Western Equatorial Pacifics Eastern Carolines (Continued)

Total Length	Weight	Head Length	Sacut to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins.	Ins. Ventral to Ant. Edge Vent	Greatest Body Depth	Length Peatoral	Height 2nd Dorsal	Height Ansl	Diameter Irla	No. Gill Rakers	Sex	Month and Year	Gean	Braminer
1488 1490 1501 1505 1509	153	440 424 422 431 433	446 439 445 453 441	800 795 799 808 807	892 897 897 900 914	465 475	429 424 458 435 415	435 439 429 434	337 369 388 380 353	230 252 260 229 227	225 251 260 233 239	60 55 55 54 55		m m m	8/50 4/51 4/51 4/51 2/51	Ll Ll Ll Ll	BMS TO TO TO KE
1509 1525 1538 1572 1590		439 445 440 449 443	441 448 458 460 469	816 824 823 839 849	904 916 917 929 963	490 485 480 500 492	430 445 462 448 493	428 443 471 455 470	372 365 393 388 367	259 241 254 271 257	245 250 242 278 240	59 60 55 59 60	8≠18	f m m f	4/51 4/51 5/51 4/51 2/51	L1 L1 L1	TO TO TO KE
1590 1599 1608 1621 1637	198 207 193	448 443 449 451 472	470 474 469 471 500	851 858 861 861 899	947 961 956 982 994	502 501 491 529 517	453 496 470 483 494	437 487 452 449 442	387 387 382 385 369	244 277 242 258 253	233 255 255 240 239	57 62 59 56 59	8∮18	m m m m	2/51 4/51 4/51 4/51 4/51	L1 L1 L1 L1	KE TO TO TO
1646 1652 1653 1666	206 <u>2</u>	449 454 454 456	496 479 480 477	890 875 879 863	982 1003 953 972	488	508 492 472 490	457 455 444 449	363 404 388 400	273 275 250 245	255 250	55 55 55 58	9≠18 8≠18	f m m	6/51 2/51 4/51 4/51	L1 L1 L1	WVC KE TO

Table 29. Bigeye from the Western Equatorial Pacifics Central Carolines

516 549 628 645 649		160 177 195 200 199	206	365 363	326 351 399 411 413	229	157 191 197	153 186	246 230	59 70 80 85 85	54 60 76 77 79	29 32 34 34	f	7/50 6/50 4/51 6/50 12/50	Pl Ll Ll Ll	BMS TO BMS KE
685 697 707 713 716	17	212 216 220 216 218	230 229	402 402	432 448 455 453 449	235 248 236	211 210 220	189 184 208	261 262 312	93 92 96 95 84	83 94 91 93 88	35 35 38 36 38	f f f	4/51 4/51 4/51 4/51 4/51	L1 L1 L1 L1 L1	TO TO TO TO

Table 29. Bigeye from the Western Equatorial Pacificate Central Carolines (Continued)

	1 :				-										1		emenen m
Total Length	Weight	Head Langth	Smout 40 II- 1st Dorsal	Joseph to I'u.	_	. 4 . 5 . 5 . 5 . 5 . 5 . 5 . 5 . 5 . 5	A T A	G J. C. C. B. S. L. J. C. J. J. C. J. C. J. C. J. C. J. C. J. C. J. J. C. J. C. J. J. C. J. J. C. J. C. J. C. J. C. J. C. J. C. J. J. C. J. J. C. J. J. J. J. C. J.	Length Fortoral	17 - 20 - 1 - 1 - 1 - H	ेटरका प्राप्ता है। इसस्य स्थापन	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		₽.X	י איז איז אליהנה.	er er	Partin the L
726 729 740 746 752	21 18	234	238 245 240 239 243	450 426 422	456 468 468 474	257	216	196 210 208 201 201	282 302 306 312 291	102 103 108 96 103	104 100 92 86 96	38 38 38 35 38	8718 8719 8718 8718	មិ	6/50 4/51 4/51 4/51 4/51	L1 L1 L1 L1	EMS TO TO TO
753 756 775 778 783	21 21 21	238		444	186 185 492 490	263 260	234 228 24ê		316		96 104 102 104 107	38999 3899 3999		f f m m	4/51 4/51 4/51 4/51 4/51	L1 L1 L1 L1	TO TO TO TO
785 790 793 801 805	21 22	246 239 241 245 246	252 258 259 259 261	458 443	401 400 505 503 505	272 279	225 238 279	222 213 223 221	319 359 314 333 321		103 109 113	41 36 41 40 40		m Î	4/51 4/51 7/50 7/50 4/51	L1 L1 L1 L1	TO TO BMS BMS TO
820 823 827 838 844	29	256 255 252 260 266	261	464 454 478	516 510 521 528 546	282 285 286 306 308	237 254 231	242 233 231 227 241	312 337 313 369 372	121 121 109 116 120	112 114	42 39 42 41 42		m	4/51 6/50 6/50 6/50	L1 L1 L1 L1	TO BMS BMS BMS BMS
868 893 913 923 945	27	263 272 284 273 271	297 287	507 513 513	536 544 586 572 586	301 319 315	245 278 256	262 261	375 416 387	136 127	118 135	42 41 42 43 42		f	7/50 4/51 4/51 4/61 12/50	Li Li Li	BMS TC TC TC TC
959 959 964 967 996	41	287 311 296 294 293	309 324 300 310 313	521 537 540	590 637 590 603 610	345 318 329	311 278 281	267 204 277 273 280		154	172 156 132	42 44 45 14	8/ls	m m	4/51 7/50 4/51 4/51 4/51	Li Li Li Li Li	TO BMS TO TO

Table 29. Bigeye from the Western Equatorial Pacifics Central Carolines (Continued)

Length	ıt	Length	nout to Ins 1st Dorsal	t to Inc. Dersal	t to Ins.	out to Ins.	Ventral to Edge Vent	test Body th	th Peatorwi	ght 2nd Dorsai	it Anal	Dismeter Iri:	Gill Raker.		h and Year		Examiner
Total	Weight	Head	Snout 1st I	Snout 2nd D	Snout Ansl	Snout Ventr	Ins。	Greate Depth	Length	Heig	Height	Diam	No °	Sex	Month	Gesr	Exam
1013 1015 1058 1059 1062	45	306 300 313 322 313	319 322 326 326 321	556 571 578 582 577	627 640 667	337 357 371	305 291 302 311 298	279 280	342 416 354 351 372	154 155 179 170 167	175	47 43 46 47 47			6/50 4/51 7/50 6/50 7/50	Ll	BMS TO BMS BMS BMS
1063 1065 1072 1081 1121		315 318 319 327 341	332 340 327 346 346	578 581 596 600	656 656 645 667 700	359 358 371	303 292 313	304	350 338 356 374 350	177 175 176	169	47 45 47 48 46		f	7/50 7/50 7/50 6/50 6/50	L1 L1 L1	BMS BMS BMS BMS BMS
1137 1140 1141 1157 1160	76	341 338 337 342 340	357 356 355 350 361	619 621 632 635 647	705 699 711	380	358 351 345	325	383 355 360 366 359	200 203 184 175 216	195 183	49 50 44 48 49	8 ≠ 18	m	12/50 7/50 12/50 12/50 4/51	Ll	KE BMS KE KE TO
1165 1190 1206 1218 1219		344 353 360 355 360	343 378	629	740 734 738	432 402 410	339 350	325 320 339 352	341 316 354 372 352	179 186 199 196 197	196	49 49 53 50 50		m	4/51 12/50 7/50 6/50 4/51	Ll	TO KE BMS BMS TO
1222 1229 1238 1243 1257	99	356	366	650 680	737 7 3 9 7 4 9	403 400	352 353 360	336	334 331	183 222 196 202 198	212 218 178	53 54 53 51 51		f	7/50 7/50 7/50 4/51 6/50	L1 L1 L1 L1	BMS BMS BMS TO BMS
1261 1268 1272 1273 1285	101	372 371 359 373 372	383 372 389	685 685 698	768 767 771	423 397 401	369 387 379	354 354 358	351	223 209 196 207 208	195 201 203	53 53 50 53 54	8 ≠ 18	m f m	7/50 12/50 4/51 4/51 7/50	L1 L1 L1 L1	BMS KE TO TO BMS

Table 29. Bigeye from the Western Equatorial Facifics Central Carolines (Continued)

	4		1	1	1						1	_					Lighter Countries
Total Length	Weight	Head Length	Snout to Ins.	Spout to Irse Ond Dorsal	Spout to In., Apol	Snout to In. Ventral	Ins. Ventral to Ant. Edg. Vent	Greatest Body Day th	Length Partoral	Height 2nd Dorsal	Height Aral	Diamoder Iras	No, Gill Rakers	Sox	konth and Year	45 OF)	Destrict
1285 1294 1309 1319 1334	105 91 95 120 107	374 373 391	377 405 406 401 393	691 713 686 716 709	781 779 775 803 795	460 415 412 432 422		378 377 359 359 372	346 376 350 367 359	188 216 204 226 197	198 209 199 223 213	55 51 50 54 54		m m f m m	4/51 4/51 4/51 4/51 4/51	L1 L1 L1 L1	TO TO TO TO
1344 1355 1356 1362 1369	120	391 395 386 392 393	403 412 410 425 420	722 722 734 733 724	799 822 811 796 824	428 451 421 427 434	379 377 415 383 409	373 397 398	389 350 344 331 365	230 209 202 201 201 222	216 213 205 190 228	55 55 57 57 53		m m m	4/51 4/51 4/51 7/50 7/50	L1 L1 L1 L1	TO TO BMS BMS
1373 1384 1386 1391 1397	128 116		416 415 415 430 422	752 746 746 765 741	821 828 847 825 814	447 459 442 440 438	385 387 426 396 393	384 415 380	351 138 347 354 383	228 225 228 245 227	220 217 206 244 241	52 59 55 53 53	8,¥18	m m f m	4/51 7/50 4/51 4/51 7/50	L1 L1 L1 L1 L1	TO BMS TO TO BMS
1412 1427 1430 1436 1447	130 132		416 429 431 435 440	759 756 767 781 789	846 840 852 851 850	462 450 436 459 447	409 408 424 413 410	397 403 396 416 400	354 381 347 374 374	239 216 227 233	228 211 243 233	54 55 56 56 53		m m m m	4/51 4/51 4/51 4/51 4/51	L1 L1 L1 L1 L1	TO TO TO
1450 1457 1485 1486 1492	149	420 419 422	443 442 446	794 809	868 863 878 891 861	461 464 408	416 420 413	428 406 416 456 440	373 359	257 265		58 58 50 60 58		f m m m	4/51 4/51 4/51 4/51 4/51	L1 L1 L1 L1 L1	TO TO TO TO
1503 1510 1526 1535 1547	175	423 412 428 441 430	434 443 458	781 796 815 813 839	889 391 910 920 919	457 476 471	458 444 462	425 417 425 417 419	388 371	245 246	4 1	55 57 53 59 54		m m m m	5/50 4/51 4/51 4/51 4/51	L1 L1 L1 L1 L1	BMS TO TO TO

Table 29. Bigeye from the Western Equatorial Pacific: Central Carolines (Continued)

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins. Ventral	Vent	Greatest Buiy Depth	Length Pestoral	Height 2nd Dersal	Height Anal	Diameter Iri	No. Gill Rakers	Sex	Month and Year	Geaz	Eraminer
1547 1554 1565 1578 1594		427 435 444	447 439 453 473 481	823 838 851 853 863	923 922 927 922 943	474 473 484 485 508	475 467 464 455 455	442 416 447 418 449	381 344 375 369 374	272 269	278 259 264 254 269	53 53 55 57 58	8\$18	m m m	4/51 4/51 4/51 4/51 4/51	L1 L1 L1 L1	TO TO TO TO
1597 1614 1615 1617	218 193	457 444 442 449	468 468 479 465	838 840 868 867	979 9 3 9 949 963	504 488	457 457 492 463	452 438 472 426	378 382 366 359	248 248	231 248 243 242	56 64 58 55		m m	6/50 6/50 4/51 4/51	L1 L1 L1 L1	BMS BMS TO TO

Table 30. Bigeye from the Western Equatorial Pacific: Western Carolines

401 407 407 518 534	2	115	129 165	225 233 228 290 297	258 251 250 316 324	131 170		104 104 102 138 133	118 113 165	36 38 36 57 62	39 35 36 56 65	20 21 21 28 28	8≠18 9≠21 9≠21 9≠20 10≠19	m m f	5/48 5/48 5/48 5/48 5/48	Tr	ORS ORS ORS ORS
549 563 576 666 673	7 11 <u>ਵੈ</u>	156 164 182 180 190	ł .	305 312 330 359 370	337 347 364 391 403	182 199 209		140 147 155 173 173	162 239 203	63 66 72 84 86	62 63 69 62 92	27 28 32 30 31	9≠19 10≠20 9≠20 10≠20	m f m m	5/48 5/48 3/51 5/48 5/48	Ll Tr Tr	ORS ORS TO ORS ORS
681 682 689 691 721		216 192 194 196 206	226 209 212 219 222	393 370 371 377 393	421 400 410 413 429	209 215 217		193 177 172 182 190	205 218 224	85 86 92 91 93	82 93 96 95 98	36 31 29 31 34	9\$21 9\$20 9\$21 8\$20	f f m m	3/51 5/48 5/48 5/48 5/48	Ll Tr Tr Tr	TO ORS ORS ORS
742 878 878 1165 1168	26 26½ 80	199 240 236 348 350	259 267 375	392 462 467 643 643	429 510 516 709 726	242 267	331	171 216 214 325 311	266 276 358		149	30 33 33 52 55	9≠20 10≠21	f m m m	3/51 4/48 4/48 3/51 3/51	L1 L1	TO ORS ORS TO

Table 30. Bigeye from the Western Equatorial Pacific: Western Carolines (Continued)

Total Longuh	Veight	Head Length	Smout to Ins. 1st Dorsal	Snout to Ins.	Smout to Int.	Sport to Ins Vencent	Irc. Vertral to Ar . Egg Vor	Caratost Bowy Depth	Length Postoral	Heart and Despei	Ecth. mrul	Disheren Ini	No. Gill Reker	》; (i) (J.)	Lown and Year	Gea.	Barren Barren S. S.
1201 1263 1290 1307 1310	85 98	364	376 405	690 697	729 776 793 801 809	412 454 439	370 365 383	330 350 361 377 336	341 347 348 337 362	179 211 197 205 219	203 205 201	54 46 53 55 51		ſ	3/51 3/51 12/50 12/50 12/50	Li Li	TO TO KE KE KE
1339 1352 1387 1388 1389	120 116	390 405 411	409 418 410	718 726 742 753 758	805 820 844 855 837	450 449 462	399 413 418	372 398 396 379 383	355 361 354 340 347	213 200 244 206 226	216 201 230 215 235	53 45 53 62 61			12/50 3/51 12/50 12/50 12/50	Ll	KE TO KE KE KE
1439 1463 1492 1593	132 135 152	426	438 463	776 783 817 866	875 883 917 981	472		387 425 411 453	379 370 363 381	248 249 216 255	234 254 223 233	54 55 57 57			12/50 12/50 3/51 12/50	Ll	KE KE TO KE

Table 31. Bigeye from the North Central Pacifics Hawaiian Islands

356 485 494 500 513	6 6	140 156 156	155 173 173	272 290 293	300 324	175 180	97 131 143 151 148	87 138 107 178 189	32 51 54 46 60	27 54 50 45 60	20 25 29 29 32	10/20 9/18 8/19 8/18	m	2/52 4/49 5/49 3/49 8/49	Pl Tr Tr Pl	WMM FCJ FCJ FCJ HBE
513 534 538 539 542	8 7 <u>1</u> 7	165 171 168 167 171	178	298 309 312 318 317	331 327 344 349 344	1	151 160 100 160 160	170 193 200 178 202	59 62 6 3 54 64	50 50 61 49	32 32 32 29 29	8/18 9/19 10/19 8/18 10/19	m m m f	4/49 8/49 8/49 3/49 8/19	Pl Pl Pl Tr Pl	KY HBE HBE FCJ KY
553 564 571 580 678	8 9.5 9	175 175 181 184 209	189 195 201	32] 325 337 341 394	359 367 382 372 427	205 20 2 204 206 237	107 165	205 218 209 005 04	05 52 72 05	61 51 50 59 70	32 30 51 57	9/19 8/18 0/18		8/49 3/49 3/49 5/49 8/49		HBE FCJ FCJ FCJ HBE

Table 31. Bigeye from the North Central Pacifics Hawaiian Islands (Continued)

				O married water		act resignant second			et lest est.		o is seeded	CH			Bur Shirt and Street Street		
Total Length	អី€1 ឌ ស់	maguar peak	Sneut to Ins. let Dorsal	Smout to Ins. 2nd Dorsal	Snout to Ins. Andi	Snaut, to Ins. Ventral	Ing. Ventral to Art. Edge Vert	රැවෙසරපාව පිරථීගී Depin	Leng'h Pac	Height and Done.	Halks And	DIMINE CONT.	M. o letal Ro	Sex	Welth Fill Two	2) (m. v. 3) 2) (m. v. 3) 2)	The state of the s
681 704 710 793 834	16 17 16 23 29		230 235 231 259 271	393 390 401 446 476	439 440 446 506 532	250 276		203 198 205 223 240	256 276 267 327 320	87 91 90 109 106	85 83 84 100 104	3: 37 36 39 39	9+18 9+17 8+17 7+18	f	8/49 8/49 8/49 5/49 2/49	Pl Pl	HBE HBE FCJ FCJ
638 890 907 921 9 54	28 34 34 41 40	284		505 513 542	540 5 6 4 569 585 596	303 315 317 320 325		240 264 269 265 280	339 346 341	118 132	113 129	39 42 41 42 41	8/19 10/18 8/18 8/18		3/49 3/49 3/49 11/49 8/49	Tr Tr Ll	FCJ
955 965 1017 1052 1076	40 43 54 58 61	290 3 02	312 323 332	544 530 578 582 570	595 586 632 653 672	329 341 361		277 270 299 297 300	325 305 385 350 302	127 156 164	135 155	42 43 44 45 45	8/18 8/18 9/17 8/18 8/18	m m	10/52 5/49 10/52 6/49 10/49	L1 L1	TO KY
1115 1181 1253 1256 1258	64 77 92 92 90	335 351 362 374 378	367 378	618 644 680 693 690	691 728 762 780 764	398 426 423		309 325 366 353 337	346 344 346 351 362	172 192 174	171 197 187	46 48 49 48 49	8≠18 8≠18 8≠18 8≠19		2/49 8/49 3/49 3/49 5/49	L1 L1	FCJ HBE FCJ FCJ FCJ
	99 103 105	371 371 369 381	391 385 391 400	691 680 697 710		412		34 5 34 8	368 337 379		191 189 201	48 47 47 47 49	8≠18 9≠17 9≠19 9≠18		2/49 3/49 7/49 5/49 4/49	L1 L1 L1	KY
1290 1291 1292 1293 1296	100 98 109 109 99	378 380 386	386 390 389	706		430		340 322 367 370 351	347 351 357	192	182 202 190	49 50 49 49	7/17 8/19 8/18 9/18 8/16	f m	6/49 3/49 5/49 4/49 5/49	El Ll Ll	KY FCJ KY FCJ

Table 31. Bigeye from the North Central Pacific: Hawaiian Islands (Continued)

al Length	بة ت:	d Length	ut to Ins.	Snout to Ins. 2nd Dormal	nout to Ins. Arai	nout to Int.	s. Ventral to ut Edge Vent	Greatest Body Detth	Length Pertoral	Height 2nd Dowsel	ght Anal	Dlameter Int.	Gill Revers		th and Year	ورة	Exactions
Total	Lei	Head	Snout	Shout 2nd	Snow tark.	Snout	And	Ore De	Len	Hei	Hei	Dla	Ż	Seg.	Month	Gear	Exz
1297 1298 1302 1306 1310	101 110 105 109 91	392	398 401 402	696 706 712 706 704	794 809 804 785 821	431 439 436 431 429		351 362 363 385 362	384 355 332 370 351	210 194 215 237 173	205 185 212 236 179	^4 47 0 55 50	8/18 8/18 11/19 8/17 8/19	f	5/49 5/49 7/49 6/49 3/49	L1 L1 L1 L1 L1	FCJ FCJ HBE KY FCJ
1311 1314 1316 1324 1324	115 105 103 105 115	385 376	399 393	717 714 707 716 721	802 782 791 799 807	443 423 430 419 436	395 37 8	377 385 363 350 389	362 375 377 364 358	213 213 190 204 201	200 206 196 191 209	47 50 48 48 50	8/18 9/18 8/19 8/18 8/17	î m	8/51 10/52 5/49 5/49 7/49	L1 L1 L1 L1	III TO FCJ FCJ HBE
1329 1332 1333 1333	108 110 121	390 387 388	425 406 399	716 736 719 730 727	794 815 811 821 830	427 444 440 441 434		346 361 355 393 366	362 367 348 358 388	202 208 214 206 204	202 206 207 207 213	49 51 48 51 51	8/18 9/19 9/19 11/19	f m	5/49 7/49 6/49 4/49 5/49	L1 L1 L1 L1 L1	KY HBE KY FOJ HBE
1336 1336 1339 1341 1343	113 114 107 116 116	382 384 394 392 384	400 408 404	718 715 730 738 727	802 806 820 813 810	425 429 446 438 437		361 344 355 366 369	349 356 355 344 369	220 205 179	215 196	49 50 48 52	8≠18 8≠18 9≠20 9≠18 9≠18	f	6/49 7/49 5/49 3/49 4/49	L1 L1 L1 L1 L1	KY HBE KY FCJ FCJ
1343 1345 1347 1352 1353	104 119	394 394 394	420 416 413	726 740	813	440 436	403	356	343 358 373	204 240 220 218 214	225 218 176	49 47 50 49 52	8,418 9,418 9,418	m	5/49 10/52 6/49 10/52 6/49	L1 L1 L1	TO
1355 1355 1356 1356 1372	118	389 396 390	422 417 426		810 818 829 811 827			362 385 389 396 365	350 369 367		203 213 207	52 50 50 50 50	8/17 9/19 9/18 9/19	m	7/49 7/49 4/49 4/49 5/49	L1 L1 L1 L1 L1	HBE HBE FCJ KY KY

Table 31 Bigeye from the North Central Patifical Hawaiian Island: (Corrected)

Total Length	Weight	Head Length	Snout to Ins. 1st Dotsal	Shout to Ins. 2nd Dorsail	Snout to Ins. Anal	Snouf. to Ins.	Ins. Ventral to Ant. Edge Vent	Grantest Body Dauth	Length Pactory	Beight 2nd Durse.	Beight Aran		Vio Gill Raker	SA N	Minth and lear	Gent	Evanter-
1375 1376 1381 1387 1389	110 114 129 122 120	389 394 400	416 419 414	746 736 751 742 753	845 816 834 841 835			366 365 366 362 394	372 356	233 226 215	226 218 208	52 40	9≠18 8≠18 9≠17 8≠19		5/49 7/49 6/49 7/49 5/49	Li Li Li	HBE KY HBE KY
1393 1397 1400 1413 1416	130	410 400 408	425 424	732 741 762 758 755	823 847 844 852 831		397	364 391 377 365 399	361 369 362	221 226	229 214 232	52	8≠17 8≠16 9≠19	£ m	6/49 8/51 4/49 6/49	L1 L1 L1	
1417 1429 1433 1436 1447	139	411 406	430 439	758 770 780 756 776	839 867 871 865 871	453 461		376 388 407 383 387	371 372	239 235 235	232	50 54 51 59 5	9,418 8≠18 8≠18 8≠18 8≠18		7/49 6/49 6/49 7/49	Li Li Li	HBE KY HBE HBE
1448 1449 1450 1450 1452	139 133 140 141 144	421 419 413	432 436	772 791 776 780 776	867 876 866 861 874	482 463		387 403 373 387 372	387 37 5 366	220 246 228	281 283	52 50	9≠18 9≠18 9≠18 8≠18 8≠18		3/49 4/49 7/49 5/49	Li Li Li	FCJ HBE KY
1455 1455 1455 1458 1469	149 157 149	441 426 416	444 439	780 787 789	868	468 480 465		396	367 405 351	225 261 228	237 210 258 255 231	5 3 55 50	8#18 9#18 9#1- 9#1-		4/49 7/49 7/49 5/49	L1 L1 L1	HBE
1471 1475 1476 1478 1487	145 163 139	420 422 426	452 426 432	800 779 790	882	1		409 391 394 379	377 381	227 226 236	236 245 220 238 236		8/18 9 /1 8 8/18 9/17	m m m	7/49 7/49 5/49 6/49 4/49	L1 L1 L1	KY

Table 31. Bigeye from the North Central Pacifics Hawaiian Islands (Continued)

Total Length	Weight	Head Length	Snout to Ins.	Snout to Ins. 2nd Dorsal	Smout to Ins. Anal	Snout to Ins. Ventral	Ins. Ventral to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Dorsal	Height mal	Diameter Iris	No. Gill Rakers	Ser	Nonth and Year	Gear	Examiner
1487 1490 1490 1491 1506	160 149 150 142 155	424 420 421	455 444 438 440 460	793 802 790 783 825	896 914 899 881 915	477 486 479 466 483		420 412 400 372 395	367 365 393 371 353	236 241		55 55 53 50 55	8/18 9/19 9/19 9/19 9/19	m m	3/49 5/49 5/49 5/49 4/49	Li Li Li Li	FCJ KY KY HBE FCJ
1506 1506 1508 1509 1514	157 164 157 154 172	424 440 429	456 451 462 451 456	799 792 814 820 809	910 886 903 919 922	474 491 487		370 418 389 391 426	361 370 375 372 370	228 248	245 246 228 239 234	57 53 51 54 55	8/19 9/16 7/18 9/19 9/18	f	6/49 5/49 6/49 5/49 5/49	Ll Ll Ll Ll	KY
1518 1521 1527 1533 1537	165 162 173 181 173	429 440 443	446 451 450 463 455	816	917 911 917 919 901	496 487 490 486 480		427 401 425 442 400	381 370 365 356 394	245 232	241 232 235 246 241	55 58 54 53 56	8/18 8/18 9/18 8/19 9/18		7/49 7/49 4/49 7/49 7/49	Li Li Li Li	HBE FCJ
1538 1540 1543 1544 1547	146 171 176 160 184	429 448 433	459 450 463 470 468	815 817 835 837 818	913 919 926 909 938	491 482 507 479 493	446	395 435 435 417 445	393 370 403 386 388		255 239 270 223 262	58 53 55 53 55	8/18 8/18 9/18	fí	6/49 4/49 6/49 10/52 5/49	Ll Ll Ll Ll	HBE FCJ HBE TO HBE
1548 1550 1550 1551 1551	155 162 168	436 439 447	441 449 466	823 817 836	935 919 912 938 937	506 491 502		411 414	382		227 253 265	55 54 57 56 54	8 ≠ 19 7 ≠ 17 8 ≠ 20 9 ≠ 19 8 ≠ 18		5/49 7/49 5/49 6/49	Ll	KY HBE KY KY
1551 1554 1558 1559 1566	168 218 173	439 440 444	458	826 844 852	953 925 930 926 935	489 490 491	465	412	393 375	239 239 240 247 257	244	50 54 57 53 59	9/18 10/19 8/19 8/18 8/18	f	4/49 5/49 10/52 6/49 7/49	L1 L1 L1 L1 L1	HBE HBE

Table 31. Bigeye from the North Central Pacifics Hawaiian Islands (Continued)

	State of the State		_				-		·				والمحادث والمعادم المعادم المعادم		-		-
Total Length	Welght	Head Length	Snout to Ins.	Sacur to Ins.	ार प्	Shout to Ins.	Ins. Ventral to	Greatest Body Depth	Length Rectors.	Height End Dorsal	Helgh Anal	Signeter Inis	No. Gill Raker	Sex	Nonth and Year	Marco	Examinas
1572 1576 1576 1581 1582	197 200	439 459 440	470 465	855 816 837 839 839	961 923 939 949 934	527 495		442 428 446 445 445	381 388 373 378 377	257 266 275 217 276	253	61 56 57 54	5≠1.8 9≠1.7 8≠1.8	î m	5/49 5/49 8/51 4/49 7/50	Ll Ll Ll Ll Tr	FCJ KY III KY KY
1584 1585 1586 1588 1590	194 178 199	444 460 462	485 478 481	827 865 843 849 850	923 984 953 972 938	497 530 516		451 427 454 427 411	374 380 375 392 366	254 217 229 234 248	222 236 244	57 60 57 58 57	9≠18 9≠18 9≠18 8≠17 10≠20	f	7/49 3/49 5/49 6/49 6/49	L1 L1 L1 L1	HBE FCJ HBE HBE KY
1590 1601 1603 1605 1607	179 179 200	460 466 440	479 475 461	849	938 948 956 941 956	505 508 500		417 457 413 448 417	399 345 383 372 396	265 259 250 257 258	246 250 255	55 59 54 53 58	10≠18 8≠17 9≠19 9≠19		5/49 7/49 5/49 4/49 7/49	L1 L1 L1 L1 L1	KY HBE KY KY HBE
1611 1611 1612 1618 1619	200 189 191	473 454 447	460 470	884 857 872 873 864	970 962 978 963 971	535 503 506	479	436 478 418 453 405	387 382 375 394 383	228 264 253 232 245	272 256 224	68 56 59 54 57	9/18 9/18 9/18	m m m	2/49 8/51 6/49 4/49 6/49	L1 L1 L1 L1 L1	FCJ III FCJ KY KY
1621 1622 1623 1624 1629	197 173 223	463 464	483 460 485	870 851	959	514 515 522		425 420 489	405 372	247 250 249	225	60 58 54 56 57	7/19 8/19 9/18 9/18 8/18	f f m f	3/49 3/49 6/49 10/52 5/49	L1 L1 L1 L1 L1	
1630 1636 1637 1644 1646	208 185 208	485 455 453	504 482		9 93 959	509 539 502 499 501		426 430 429	369 372 387 405 362	258 239 259	251 235 245	56 57 58 56 55	9/17 9/20 9/18 9/19 8/19	ſ	5/49 6/49 5/49 5/49 6/49	L1 L1 L1 L1 L1	FCJ KY HBE KY KY

Table 31. Bigeye from the North Central Pacifics Hawaiian Islands (Continued)

						,	MORNEY-WOOD ON THE										The second second
Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Spout to Ins. Ventral	Ins. Ventral to Ant. Edge Vent		Leugth Pectoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	Gest	Examinas:
1654 1655 1655 1656 1663	202 225 232 215 222	462 482 481	494	867 895 889 873 893	958 980 1015 993 993	521 509 530 529 545	4 89 498	437 476 444 475 462	371 372 398 412 416	279 241 275 284 296	273 229 271 283 276	56 57 60 55 57	8/18 9/18 8/18 8/18	f	7/49 10/52 6/49 8/51 7/49	Li Li Li Li	TO KY III HBE
1664 1664 1665 1665	195 216 202 224 222	475 470 469	485 510 506		978 1000 999 968 987	513 532 526 523 532		434 424 427 464 448	396 387 380 385 387	259 252 271 220 273	260 263 261 232 201	56 57 62 52 60	8/18 9/18 8/19	f m	5/49 7/49 5/49 4/49 7/49	L ₁ L ₁ L ₁ L ₁	KY HBE KY KY HBE
1673 1675 1679 1684 1688	200 222 198 229 230	478 475 477	507 487 512	906 875 888	1001 1017 1006 985 1019	554 539 539 523 541	475	458 463 427 451 459	389 416 383 414 397	301 279 254 286 246	295 287 332 291 257	56 59 57 58 61	8/18 7/19 8/18 9/18	m m m	8/51 7/49 5/49 7/49 4/49	L1 L1 L1 L1 L1	III KY FCJ KY FCJ
1693 1693 1695 1696 1698	241 245 224 223 211	484 477 482 480 466	508 499 495	912 908 908	1012 1010 1010 1003 987	545 542 535 531 515		458 439	383 400	277 281 249 270 258	283 269 249 268 244	56 57 55 59 59	9/19 9/19 8/18 8/18 9/19		6/49 3/49 7/49 7/49 6/49	L1 L1 L1 L1 L1	KY FCJ HBE KY
1702 1704	239 214 238	485 489 480	506 502 496	901 879 922	991 1022 1022 1019 1018	554 530		455 462		262	256 266	53 55 59 53 57	8=18 8=18		7/49 6/49 6/49 8/51 3/49	Ll	
1707 1707 1708 1710 1711	221 203 220	476 479 470	479 495 496	876 874 886		538 539 541 532 547		456 449 461	401 386 405 412 385	310 262	282 258 2 6 7	59 57 60 56 63	8/18	f m	6/49 6/49 7/49 7/49 5/49	L1 L1 L1 L1 L1	KY KY HBE KY HBE

NO DATA ARE MISSING. THIS PAGE IS BLANK DUE TO MISNUMBERING.

Table 31. Bigeye from the North Central Pacifics Hawaiian Islands ($^{\circ}$ ontinued)

-		processors:	-	ja province de la company		дотонени сь		V						-			-
Total Length	Weight	Head Length	Snout to Ins.		Spout to Ins.	Snout to Ina.	Ins. Ventral to	st Bod	Length Pertoral	Beight 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	Gerr	Lxaniner
1713 1713 1714 1715 1718	239	486	473 514 489 503 497	894 929 893 895 877	1013 1020 1005 1013 1013	524 528 548 571 545		458 452 477 505 437	388 387 382 414 374	242 288 272 284 260	272	58 57 60 57 57	8/19 9/18 7/18 8/19 8/19	m	6/49 7/49 7/49 7/49 7/49	Ll Ll Ll Ll	HBE KY JWR HBE HBE
1718 1722 1724 1726 1729	230	503 482	496 511 519 514 503	901 903 912 902 926	1005 1012 1039 1007 1030	539 542 561 547 570		498 457 483 458 495	390 384 368 392 400	261 251 295 274 281	262 272 283 267 276	56 60 63 56 57	9≠18 9≠19 9≠19 10≠18	m m m	10/52 7/49 5/49 7/49 8/51	L1 L1 L1	TO HBE KY HBE III
1730 1732 1732 1734 1735	239 209 232 233 216	472	500 470 501 493 517	913 871 917 913 910	995 998 1008 1024 1020	530 522 518 536 566	512	475 425 499 466 460	390 395 406 382 398	255 261 257 281 280	258 249 268	56 55 57 61 55	8 ≠ 18 9 ≠ 18 9 ≠ 18 9 ≠ 18 9 ≠ 18	m m m	6/49 5/49 10/52 6/49 7/49	L1 L1	KY TO KY KY
1737 1738 1740 1742 1743	231 241 216 234 220	485 489 471 475 471	512 508 4 98 503 508	928 914 894 909 916	1023 1040 1000 1019 1020	541 543 533 544 532		466 440 450 465 468	384 420 383 409 406	277 291 258 294 304	252 258 294	56 61 57 57 58	8≠19 9≠19 8≠19 8≠18	m m	7/49 5/49 6/49 6/49 5/49	L1 L1 L1 L1	KY KY KY HBE
1747	252 253 230	504 499 478	516 488	932 926 895	1015 1059 1063 1020 1049	547 560	468	491 466 471 455 475	408 394 386	278 275	257 276 273		9/21 10/18 10/19 8/18 9/19	m m	8/51 4/49 6/49 7/49 6/49	Li Li Li Li	III FCJ KY KY KY
1752 1755 1757 1758 1759	245 230 222	421 502 502 497 487	510 509	919 925 918	1061 1036 1045 1025 1020	557 564 560	508	443	377 378 368	267	264 268 273	58 62 60 61 62	7≠18 9≠18 9≠19 9≠19	m m f	6/49 8/51 6/49 6/49 5/49	LI LI LI LI	HBE III HBE KY KY

Table 31. Bigeye from the North Central Pacifics Hawaiian Islands (Continued)

												-					
Total Length	Weight	Head Length	Shout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins.	Ins. Ventral to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	Gear	Examiner
1765 1767 1768 1770 1773	251 235 241 254 265	508 497 500 500 495	541 518 516 524 517	938 939 920 930 920	1042	570 562 559 562 547		504 440 463 463 457	382 397 398 389 399	290 249 290 267 281	283 249 299 273 309	65 57 60 63 57	9/18 8/19 8/19 9/18 8/18	m m m	4/49 6/49 6/49 6/49	L1 L1 L1 L1	FCJ HBE HBE KY KY
1775 1791 1795 1800 1801	253 261 261 276 229		529 532 518 536 505	953 910 932 957 911		568 560 571		466 489 490 517 446	371 425 402 409 391	254 310 283 284 261	287 285	58 62 62 62 57	8/19 8/17 8/19 9/18 8/19	m m m	6/49 7/49 7/49 8/49 7/49	L1 L1 L1 L1 L1	KY HBE HBE KY
1801 1806 1807 1812 1813	321 271 270 257 253	500	527 516 510	967 936 931 939 945	1054 1050 1046	566 561 555		500 509 479 485 503	440 402 412 403 408	302 282 305 283 307	276 298 291	57 61 60 60 61	8/19 8/19 9/19 8/18 9/18		10/49 8/49 8/49 7/49	II II II II	JWR HBE HBE KY HBE
1814 1818 1833 1837 1842	264 267 294 267 332	510 515 511	524 542 547	956 949 980 956 949	1081 1090 1069	565 566 561		471 484 509 463 544	408 396 388 406 414	279 269 282 315 295	271 274	65 62 59 58 63	9/18 8/18 9/18 9/18 8/17	f m m	7/49 6/49 8/49 5/49 10/49	L1 L1	HBE KY HBE HBE KY
1880 1883 1891	292 274 309 300	522 520 525 534	536 546 542 555	974 988 982 985	1107	571 575 588 595		499 517 534	393 406 398 408	301 302 294	292 279 299	66	9/19 8/17 9/18 9/18 8/18	f m m m	5/49 9/49 5/49 9/49 9/49	L1 L1 L1	KY HBE HBE
1947	335	550	550	992	1135	625	556	558	421	308	285	59	8∮18	m	8/51	Ll	III

Table 32. Bigeye from the Northwestern Pacific: Japan

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins. Ventral	Ins. Ventral to Ant. Edge Ven1	est Bod h	Length Reutoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	(1937	Exeminer
520 523 531 545 719	2.7 2.6 2.7 3.0 16	166 165 167 173 223	173 179 181	303 305 319	331 337 338 351 471	182 183 186 190 255		150 149 151 152 198	197 216 201	65	57 59 58	22 32 31 33 35	9/20 9/20 9/18 9/19		5/49 5/49 5/49 5/49 2/49	Pl Pl Pl Pl Ll	BMS BMS BMS BMS FCC
1491		424	441	809	896	47?		421	364	202	215	56			1/49	Ll	FCC
موما	1 45		able			1	20° 1	West	Long	gitu	de 	_	orial I			T 3	morr
969	47	286	321	572	619	325	304	257	430	127	123	47	7/20	£	10/52	Ll	TSH
					•	,				'							
			able			1	40° 1	Nest	Long	gitu	de		orial :	Paci	fics	,	
921	38		1		Alb:	1	40° 1	Nest	Long	gitu	de			Paci.	fic:	Ll	RS
921	38	267	1	526	580	303 303	40° 1 293 e fro	West 250	Long	llo entre	de 109 al Ec	44		f	8/52	Lı	RS
917	39	267 Te	281 able	526 35。	580 Alba	303 303 acore	293 293 293 289	250 om t 236	Long 400 he Coine 1	gitue 110 entre Islan	de 109 al Econds 119	44 44 46	orial 1	f Paci:	8/52 fic:	Lî	TC
917 944 954	39	267 267 276 280	281 able 304 301 316	526 35. 542 546 566	593 593 597 603	303 303 acore Es 310 313 318	293 293 293 291 286	Nest 250 om t rn L 236 237 243	Long 400 he Ce ine 415 406 409	110 110 entrs Islan 124 116 105	109 al Econds 119 110 105	44 quato 46 46 51	9/20 9/20	f Pacin	8/52 fics 9/51 11/52 2/52	Lî Lî Lî	
917 944 954 961	39 41 41	267 Te 267 276 280 284	281 304 301 316 313	526 35. 542 546 566 565	593 593 597 603 615	303 303 313 313 318 317	293 293 293 289 291 286 300	Nest 250 om t 236 237 243 252	Long 400 he Coine 115 406 409 420	110 entra Islan 124 116 105 114	109 al Econds 119 110 105 116	44 quato 46 46 51 50	9/20 9/20 9/21	f Paci:	8/52 fics 9/51 11/52 2/52 2/52	L1	TC
917 944 954 961 961	39 41 41 43	267 267 276 280 284 275	281 304 301 316 313 312	526 35. 542 546 566 565 560	593 593 597 603 615 604	303 303 310 313 318 317 307	293 e fro 289 281 286 300 295	250 om t 236 237 243 252 247	Long 400 he Coine 415 406 409 420 434	110 entrs Islan 124 116 105 114 121	109 al Econds 119 110 105 116 118	44 46 46 51 50	9/20 9/20 9/20 9/21	f Paci:	8/52 fic: 9/51 11/52 2/52 2/52 2/52	Lî Lî Lî Lî	TC III
917 944 954 961 961 979 979	39 41 41 43 43 47	267 267 276 280 284 275 290 283	281 304 301 316 313 312 311 320	526 35. 542 546 566 565 560 563 563	593 597 603 615 604 615 622	303 303 310 313 318 317 307 332 236	293 293 293 289 289 286 300 295 296 300	Nest 250 om trn L 236 237 243 252 247 258 259	Long 400 he Co ine 415 406 409 420 434 428 424	110 entra Islan 124 116 105 114 121 124 120	109 al Econds 119 110 105 116 118	44 quato 46 46 51 50 49 45	9/20 9/20 9/21	f Paci:	8/52 fic: 9/51 11/52 2/52 2/52 2/52 9/51 9/51	L1 L1 L1 L1 L1	TC III III
917 944 954 961 961	39 41 41 43	267 267 276 280 284 275 290 283 280	281 304 301 316 313 312 311 320 309	526 35. 542 546 566 565 560 563 563 560	593 597 603 615 604 615	303 303 310 313 318 317 307 332 236	293 293 293 289 289 286 300 295 296 300	Nest 250 om t 236 237 243 252 247 258 259 252	Long 400 he Coine 415 406 409 420 434 428 424 421	110 entra Islan 124 116 105 114 121 124 120 128	109 al Econds 119 110 105 116 118 119 115 123	44 quato 46 46 51 50 49	9/20 9/20 9/21	f Paci: f f f m f	8/52 fics 9/51 11/52 2/52 2/52 2/52 9/51 9/51 9/51	L1 L1 L1 L1 L1	TC III
917 944 954 961 961 979 979	39 41 41 43 43 47 48	267 267 276 280 284 275 290 283 280 290	281 304 301 316 313 312 311 320 309 336	526 35. 542 546 566 565 560 563 563 560	593 597 603 615 604 615 622 619	303 303 310 313 318 317 307 332 236 335 327	293 293 293 289 291 286 300 295 296 300 299	Nest 250 om t 236 237 243 252 247 258 259 252 267	Long 400 he Coine 415 406 409 420 434 428 424 421 452	110 entra Islan 124 116 105 114 121 124 120 128 125	109 al Econds 119 1105 116 118 119 115 123 131	44 quato 46 46 51 50 49 45 46	9/20 9/20 9/20 9/21 8/20	f Paci: f f f m f m m	8/52 fic: 9/51 11/52 2/52 2/52 2/52 9/51 9/51	L1 L1 L1 L1 L1 L1 L1	TC III III

Table 36. Albacore from the Central Equatorial Pacifits Phoenix Islands

Total Length	Weight	Head Length	Snout to Ins.	Snout to Ins.	Snout to Los.	Snout to Ins. Ventral	Ins. Ventral to Ant. Edge Vent	Greatest Body Dupth	Length Pestom.	Height 2nd Dorsei	Heigh Anel	Diameter Iri	Me. 3111 Baker	Sex.	Month and Kear	GRAZ	Examinati
892	3 5	265	288	518 517	562 563		276 270	233 232	381 415	107 111	104 105	43 44	8,∮20 8,∮20	f f	3/52 11/52	L1 L1	TO
894 903	37 34	262 271	296 293	524	577		282	235	396	115	113	45	8=21	f	3/52	Ll	TO
905	3 5	267	290	529	571	306	273	234	394	102	101	43	7,419	ſ	3/52	Lì	RS
906	37호	258	293	5 34	579		290	247	396	104	103	42	9/20	Ĺ	3/52	Ll	RS
907	34 <mark>호</mark>	266	299	526	566	296	271	232	408	115	115	45	9/20	ſ	3/52	L1	TO
911	38	269	298	532	577		280	246	404	115	113	46	8/19	ŗ	3/52	Ll	RS
912	3 5	269	296	525	572		274	240	403	107	106	43	8/20	f	11/52		TO
919	35½	268	299	540	586		288	238	383	103	107	45	9/21	ſ	3/52	Ll	TO
925	37	265	294	534	573	299	279	250	382	112	109	46	8,420	f	3/52	Li	TO
933	38	269	302	5 3 9	584	301	286	242	3 95	114	116	45	8 <i>≠</i> 20	£	11/52		TO
935	40	281	311	546	591		279		421	105		48	9/21	f	3/52	Ll	RS
942	38	265	305	549	591			245	428	114	109	44	8/19	m	3/52	Ll	TO
948	40	277	311	560	605		292	243	431	121	120	48	9/21	ſ	11/52	Ll	TO
952	38½	275	302	548	597	313	291	242	412	114	108	46	9/21	f	3/52	Ll	TO
963	3 9	284	302	5 53	601	312	293	244	431	120	116	48	8/19	m	11/52	Ll	III
967	42불	286	313	557	611		299		440	126	123	44	9/20	m	3/52	Ll	
994	46	291	317	569	620	329	297	250	418	122	122	47	8/20	70.	11/52		TO
1012	45	293	326	588	633	328	311	259	450	126		<u>4</u> 8	9\$20	m	3/52		RS
1040	44	3 29	597	645	340		312	275	432	127	128	49	9/22	\mathbf{m}	3/52	Ll	RS

Table 37. Albacore from the Western Equatorial Pacific; Eastern Marshalls

829 840 848 855 862	27 3 0	249 252 257	282 285 287	485 496 504	528 538 545	278 284 286	257 260 259	217 227 229	390 368 401 389 391	100 107 100	98 108 100	41 42 42	9≠20 9≠19 9≠20	m f f	2/52 2/52 2/52 2/52 2/52	L1 L1 L1 L1	GIM RS RS TO

Table 37. Albacore from the Western Equatorial Pacifics Eastern Marshalls (Continued)

	·	7															1
Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins.	Snout to Ins.	Snout to Ins.	Ins. Ventral to Ant. Edge Vent		Length Pertoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	Geas	Examiner
863 874 878 886 886	33 32½ 33	254 262 262 258 265	277 290 293 299	509 522 516 524 524	559 558	290 300 291 289 297	258 264 272 270 269	219 230 231 228	393 404 425 400 412	111 107 106	112 106 106	44 42 43 43 43	8/20 8/21 9/20 9/21 9/21	f f f m	2/52 2/52 2/52 2/52 2/52 2/52	L1 L1 L1 L1	TO RS RS TO RS
892 892 895 895 899	34 38 34 34 34	258 266 264 268 265	293 299 292 303 296	516 528 531 532 526	568	289 295 300 301 298	273 273 268 275 267	229 244 236 232 224	402 381 412 374 418	108 111	108 107	44 45 43 46 43	9/19 9/21 9/20 10/20 8/19	f f m f m	2/52 2/52 2/52 2/52 2/52	Ll Ll Ll	RS TO RS
899 900 901 903 904	35 35 34 37	265 262 261 264 263	297 294 291 297 298	534 527 523 529 530	569 567	300 295 292 300 293	276 272 274 283 278	243 237 231 238 247	425 404 424 425 413	110 106 111 114 116	104 103 111 116	44 45 45 44 45	8/20 8/20 9/21 9/21	f f f f	2/52 2/52 2/52 2/52 2/52	Li Li Li Li Li	RS RS GIM RS TO
906 906 910 910 914	35 35 35	269 270 265 266 273	300 302	526 531 539 529 538	576 579	301 302 299 298 305	272 277 281 274 276	241 235 239 234 238	415 428 416 399 408	117 113 104	117 115 112 100 111	45 46 46 44 43	9/20 8/19 10/20 8/21 9/20	f f f m	2/52 2/52 2/52 2/52 2/52	Ll Ll Ll	RS RS RS RS
921 922 922 934 955	37 38 40		302 303 309	542 537 555	581	316 314	273 264 278	245 239 247	408 423 449	119 113 109 125 119	109 110 123	47	8/20 10/20 9/20 10/20 8/20	f m f m	2/52 2/52 2/52 2/52 2/52	Li Li Li	TO RS RS RS TO
977 982 985 987 1002	44 46 50		326	573 577 583	621 624	327 323 327	282 304 308	249	413 412 428	116 125 126 126 129	127 120 123	44 48 49 48 47	9/20 9/21 9/20 8/20 10/20	m m m m	2/52 2/52 2/52 2/52 2/52 2/52	L1 L1	TO GIM GIM RS RS

Table 37 Albacore from the Western Equatorial Pacifics
Eastern Marshalls (Continued)

Total Length	Weight	Head Length	Snout to Ins.	ut to d Dors	12 m	Snout to Ins.	Ins. Ventral to Ant. Edge Vent	test th	Length Pestoral	Helght 2nd Dorsel	Helght Anal	Diameter Iris	No. Gill Rakers	X∺S	Month and Year	රූපියා	Examiner
1002 1011 1025 1027	52 50	292 294 293 293	331	590 596 600 585	636 638	327 338 332 337	303	2 6 6	430	111 123 124 139	117 131 118 133	46 45 25 47	10/20 9/20 9/20 8/20	m m m	2/52 2/52 2/52 2/52 2/52	L1 L1	RS RS RS

Table 38. Albacore from the Western Equatorial Pacific:
Western Marshalls

					. ,												
843	274	249	288	500	536	279	260	213	386	105	96	41	8/21	f	9/51	Ll	MAG
944	39 <u>3</u>	279	308	543	595	311	290	247	434	118	112	42	8/19	m	8/51	Ll	WVC
957		272	311	553	600	301	299	245	439	120	112	44			2/51		KE
963	41	277	320	561	606	304	302	242	396	119	115	46	8≠19	f	7/51	Ll	WVC
1032		297	341	603	654	328	327	268	447	135	131	46	9/20	m	7/51	Ll	WVC
1053	57g	303	350	613	667	341	331	283	452	138	134	46	8/20	m	9//51	Ll	WVC
1077	$56\frac{3}{4}$	311	344	612	669	343	328	275	443	141	134	50	9/21	m	7/51	Ll	WVC
1078	$55\frac{1}{4}$	306	348	615	674	336	343	279	473	150	147	47	9/21	m	7/51	Ll	MAC
1081	56^{1}_{2}	305	350	617	675	350	328	277	473	149	142	45	9≠19	m	9/51	Ll	WVC
1086		307	336	615	685	355	333	278	433	140	141	46	·		2/51		KE
1094	61	321	361	631	680	359	324	283	474	146	145	46	9\$19	m	9/51	Ll	MAG
1099	$60\frac{3}{4}$	320	359	625	682	348	339	282	458	158	143	48	8≠20	m	8/51	Ll	MAG
1122	$64\frac{1}{4}$	324	365	644	699	362	344	298	472	147	145	47	9/20	m	8/51	Ll	WVC
	_]		l				ļ / !	,	

Table 39. Albacore from the Western Equatorial Pacific: Eastern Carolines

825	238	277	479	517	271	256	213	352	105	102	39		8/50	L1	BMS
848	249	275	489	532	279	261	210	371	113	109	39	9/22	8/50	Ll	BMS
869										112		,	8/50	Ll	BMS
871										109			8/50	Ll	BMS
874	254	290	504	553	287	273	224	397	116	112	41	8≠21	8/50	Ll	BMS
													,		

Table 39. Albacore from the Western Equatorial Pacifics Eastern Carolines (Continued)

			1	1	T	T	1	,	1			(
Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins.	Snout to Ins.	Ins. Ventrel to Ant. Edge Vent	Greatest Body Depth		Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year		Bkauiner
877 878 881 883 886	32 32 ¹ / ₄	252 250 254 255 256	283 278 283	500 510 510	554 537 556 555 571	284 288 287	260 278 272	221 224 214	403 377 418	115 113 109 110 112	106 111 107	41 39 40 42 41	8/20 8/19 8/21 9/21	n	6/51 8/50 8/50 8/50 8/50 9/51	L1 L1 L1 L1 L1	WCV BMS BMS BMS WCV
889 894 895 901 904	32 <u>3</u>	259 267 265 281 270	301 301 308	525 527 560	570 605	291 296 299 318 299	283 274 292	224 225 248	412 429 453	120 114 124 131 121	111 155 125	43 42 45 41 45	9/20 8/19	m	2 /51 9/51 2/51 8/50 8/50	L1 L1 L1	KE WCV KE BMS BMS
905 913 920 920 924	3 5	262 266 271 271 266	300 289 295	533 526	575 585 582	297 295 303	280	235 254 248	426 401	120 124	120 105 121	42 42 45 46 40	8/20 8/21	f m	4/51 6/51 2/51 2/51 7/50	L1 L1	TO WCV KE KE BMS
926 930 931 931 933		275 269 266 276 263	300 297 310	527 552	58 7 585	306 301 305	294 290	230 230 241	467 383 416	111 121	124 110 113	46 41 43 41			2/51 7/50 7/50 2/51 8/50	L1 L1	KE BMS BMS KE BMS
934 937 946 949 951			311 301 307	552 527 541		308 302 313	298 288 295	253 238	418 427 410	1.25	114	42 47 42 42 46	10/20	m	8/50 2/51 8/50 8/50 2/51	L1 L1	BMS KE BMS BMS KE
952 953 955 955		278 275 273 276	312 305	554 541	599 598 594 594	312 308	297 294	251 248	414 424	125 129 119 127	123 116	43 47 45 43	9/20 9/20		8/50 8/50 2/51 8/50	L1	BMS BMS KE BMS

Table 39 Albacore from the Western Equatorial Pacifics Eastern Carolines (Continued)

													particular record				-
Total Length	Weight	1 3 1	Smout fo Ins. Lat Dorzel	Snout to Inc. 2nd Dorsal		1-1	-27 BO	13 P.	Length Pactoral	Height 2nd Dorsal	Height Anal	Dismeter Iris	No. Gill Rakers	Sek.	Month and Year	Ge&??	Exeminer
956 957 958 959 960		278 274 276 277 276	307 310 301 310 315		592 603 604 602 610	311 312 308 310 315	288 299 313 294 304	241 256 249	417 416 409	124 126 131 121 129	124 118 135 122 129	46 45 44 43 45	8≠20 8≠20	f	8/50 2/51 8/50 4/51 2/51	L1 L1 L1	BMS KE BMS TO KE
962 964 970 971 973		272 277 281 276 279	310 309 309 306 306	550 550 553 555 551	597 596 609 606 616	308 313 320 309 315	295 301 300 308 304	247 255 251	423 428 412	123	125 121 128 126 133	43 44 44 42 43	9≠20 8≠19		8/50 8/50 8/50 7/50 8/50		BMS BMS BMS BMS BMS
978 979 979 980 983	424	282 280 281 283 283	307 311 309 314 314	551 555 566 569	610 603 617 613 612	320 309 323 327 315		250 256 243 254 259	437 450	122 133 122 142 130	120 132 122 134 128	43 42 45 44 49	8≠ [′] 21	m.	8/50 6/51 2/51 8/50 2/51	L1 L1	BMS WYC KE BMS KE
987 987 989 990 994	44호	280 297 285 282 288	317 329 312	566 563 575 555 578	624 610 615	320 328 316 317 321	300 295 306	256 248 262 254 263	454 428 430	124 129 119	132 128 122 120 130	44 46 44 43 45	8/20 9/19 9/20 9/20 9/21		8/50 8/50 8/50 8/50 6/51	L1 L1 L1 L1 L1	BMS BMS BMS BMS WVC
996 999 1000 1002	441	294 284 288 287 289	326 324 320	564 586 579		320 329 315	320 317 325	264 259 252	443 426 439	138 128 137 131 127	135 127 130	44 44 47 44 46	9≠20 9≠21 9≠21	m f m	4/51 8/50 2/51 6/51 9/51		TO BMS KE WVC WVC
1002 1006 1006 1009		295 285 285 291 296	308 312 313	571 564 575	610 630 635	322	305 319 308	255	419 457 434	150 130 127 134 127	129 123	43 44 46 44 46	9/21 8/20 9/20	m	8/50 8/50 8/50 2/51 6/51	Ll	BMS BMS BMS KE WVC

Table 39. Albacore from the Western Equatorial Pacifics Eastern Carolines (Continued)

		1	1		r	Г			The Section Colors							agranda de la composito de la	
Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins.	Shout to Ins.	Ins. Ventral to Ant. Edge Vent	Greatest Body Depth	Length Pettoral	Height 2nd Dorsel	Height Anal	Diameter Irls	No. Gill Rakers	Sex	Wonth and Year	Gaar	Essaniner
1010 1011 1018 1019 1021		289 292 296 295 302	324 324 335		625 631 634 645 632	326 334 333 327 337	305 307 303 322 298	255 263 263 266 266	455 453 458 448 462	131 129 137 143 139	134 143	45 45 45 46 46	9≠20 8≠20	m	2/51 8/50 2/51 2/51 4/51	L1	KE BMS KE KE TO
1024 1035 1035 1036 1039	50늴	293 294 301 301 300	324 330 331	583 590	639 635 649 653 654	330 330 342 335 340	318 315 313 325 321	266 258 267 270 271	437 481 482 414 455	132 140 145 131 136	131 132 138 136 145	45 46 44 52 50	9/20 8/20 8/21	m f	2/51 8/50 9/51 5/51 2/51	L1 L1 L1	KE BMS WVC TO KE
1041 1042 1048 1052 1053	4934 512	301 295 302 300 290	340 338 333	601 590	658 651 647 649 845	344 328 337 342 324	316 333 315 324 325	269 269 288 279	452 459 453 486 418	133 142 151 141 127	133 134 144 135 127	44 47 46 48 46	8/21 8/19 9/20 9/19 9/21	m m m	4/51 6/51 9/51 8/50 4/51	L1 L1 L1 L1	TO WVC WVC BMS TO
1053 1053 1063 1064 1066	57호	303 301 304 299 308	337 342 340	607 606 6 06	667 663 667 668 670	341 351 342 337 342	331 328 331 342 341	283 290 274 276 283	452 457 467 485 453	137 146 140	134 132 141 141 135	46 46 45 45 47	9∤21 8∤20	m m	9/51 2/51 4/51 2/51 8/50	L1 L1	WVC KE TO KE BMS
1067 1071 1073 1077 1078	57 4	312	329 339 351	610 608 620	676 669 679	347 356	345 334 329	269 386	470 472 429	151 139	141	45 46 48 49 48	9/21 8/19	m m	2/51 5/51 2/51 2/51 9/51	L1	KE TO KE KE
1079 1084 1087 1093 1093		300 312 311 314 316	340 340	614	666 666 682	343 358 357 358 359	322	272 291 214 280 275	434 466 473	134 140 144	135	45 48 47 49 50	9/20 8/19 9/21 8/20		2/51 8/50 8/50 8/50 8/50	L1 L1 L1 L1	KE BMS BMS BMS BMS

Table 39. Albacore from the Western Equatorial Pacifics
Eastern Carolines (Continued)

Table 40. Albacore from the Western Equatorial Pacific: Central Carolines

887 901 948 958 959		253 281 277 278 275	308 307	507 560 545 544 552	605 597 606		292 285 299	248 243	453 430 436	131 121 123	125 118	41 41 42 42 45		f	7/50 8/50 7/50 7/50 4/51	L1 L1 L1 L1 L1	BMS BMS BMS TO
969 968 972 972 979		279 279 274 281 279	309 316	557 540 561	606 611 603	312 333 318	306 298 294	258 233 247	444	121 136 137	127 131 122	44 44 42 43 44	8 <i>‡</i> 20		7/50 7/50 7/50 7/50 6/50	Li Li Li Li	BMS BMS BMS BMS BMS
981 982 983 988 991	41 45 47	288 277	318 311 313	559 573 561 553 576	616 619 610	337 320	297 300 297	262 272	431 438 445	125	123 126 127	45 45 45 45 42	9≠21 8≠21	f f m	4/51 4/51 6/50 6/50 4/51	L1 L1 L1 L1	TO TO BMS BMS TO
1000 1002 1007 1013 1024	48	287 282 289 291 298	314 314 322 336 330	570 563 570 589 584	617 640 641	320 325 331	321 309	258 248 245		136 130 133	133 118 127	43 42 43 44 43		m m	7/50 7/50 7/50 4/51 6/50	L1 L1 L1 L1	BMS BMS BMS TO BMS
1037		293 302	336 336	584 607				269 273	466 454		129 139	43 46	8/20 8/21	m	6/50 4/51	L1 L1	BMS TO

Table 41. Albacare from the Western Equatorial Pacific Western Carolines

Total Length	Weight	Head Length	Snout to Ins.	to	Snout to Ins. Anal	Shout to Ins. Ventral	Ins. Ventral to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	Gear	Examiner
696 973 1039 1042 1049	41 50 50 51	214 278 290 294 298	231 307 316 323 320	300 552 563 599 590	437 606 630 640	236 313 310 353	194 302 325 310 310	184 245 257 270	260 140 476 476 474	83 118 110 133 125	84 113 124 125 131	33 41 15 15 44	3/21 8/20 9/21 8/20		3/51 12/50 12/50 12/50 12/50	Ll	TO KE KE KE

Table 42 Albacore from the Northeastern Pacific: United States Coast

533 539 540 556 620	5 1 5 1 7 1	. 56 . 56 . 56 . 63	179 183 186	322 331 529	356 551 357		132 130 130 144 151		55 48 46 50	45 47 45 45	331 31 54 30 34	9/19 9/21 9/21 9/19 9/21	f	9/49 9/49 9/49 9/50 9/50	Tr Tr Tr Tr	HHE HHE HHE HHE
621 622 625 636 644	12 1 112 1 15 1 12 1 15 1	.85 .83 .83	206 206	500 300 3 71	405	200 213 2 00	143 150 150 163	200 257 251 240 251	3.2 5.6 5.6 5.5	500550 50550	40 33 30 37 30	9/20 9/20 9/22 9/21		9/49 8/49 3/49 9/49 9/49	Tr Tr Tr Tr	HHE GWM HEE HHE HHE
659 691 720 732 769	15 1 1 13 2 2 16 2 2 2 2 2 2	01 12 18	222 226 234 236 248	406 425 130	421 430 457 472 400	229 239 247	170 165 105 183 188	202 200 200 209 209 332	73 69 73 75 78	70 61 73 71 60	34 37 33 39 37	9/21 8/20 9/21 9/21 9/20	m f	8/49 8/49 8/49 9/50 9/50	Tr Tr Tr	GWM GWM GWM HHE HHE
814	24 2	38	267	177	500	268	200	0.2	SE		42	8/19	m	9/50	Tr	HHE

Table 43. Albatore from the Lorth Central Pacific Hawaiian Islands

876	31	256	275	503	565	31.3	270	217		100	104	40	9/21	f	11/49		MBS
916	34	269	297	533	587	307		230	402	113	117	39	9/21	1	8/49	Ll	HBE
930	37	263	302	541	539	502		233	415	119	116	40	9/20		9/49	L1	HBE
942	40	270	297	544	591	003		2.50	+10	124	126	41	9/21		8/49	Ll	HBE
956	42	271	311	5.0	.13	33.0		5	4.20	122	125	43	3/21		9/49	Ll	HBE
	L	l									L	and the same		-			

Table 43. Albacore from the North Central Pacifics Hawaiian Islands (Continued)

manage of the same		,											·				
Total Length	Weight	Head Length	Snout to Ins.	Snout to Ins.	Snout to Ins.	Snout to Ins.	Ins. Ventral to Ant. Edge Vent	est Bo	Length Pertoral	Height 2nd Dorsal	Height Anal	Diameter Inte	No. Gill Rakers	Sex	Month and Year	4600	Examiner
962 966 973 981 985	41 41 43 46 46	276 278 275 279 274	297 309 308 319 321	539 562 552 571 577	597 620 622 634 618	315 323 316 319 323		249 239 242 253 255	418 410 417 415 429	124 126 122 129 132	118	43 42 42 41 42	9≠20 9≠22 8≠21 9≠20 8≠21		8/49 9/49 6/49 9/49 5/49	L1 L1 L1 L1 L1	HBE HBE KY HBE HBE
988 989 991 993 1001	47 47 43 45 46	277 280 279 282 278	317 319 321 320 320	583 562 561 570 583	630 612 622 627 627	325 313 327 334 315		274 258 249 261 253	397 419 405 465 425	124 137 123 134 128	132	42 43 41 42 38	9≠20 10≠21 9≠20 9≠21 9≠21	f	9/49 9/49 9/49 9/49 8/49	L1 L1 L1 L1 L1	HBE HBE HBE HBE
1001 1002 1004 1010 1013	47 47 49 51 50	288 282 294 295 294	327 310 328 329 319	576 575 587 591 582	630 636 636 651 623	328 326 387 330 336		268 255 259 257 262	437 411 441 406 459	132 138 130 129 139		41 43 44 49 46	9≠19 10≠20 9≠21 8≠20 8≠22	m m	8/49 8/49 8/49 8/49 9/49	L1 L1 L1 L1	HBE HBE HBE HBE
1018 1020 1020 1020 1021	48 49 52 52 54	290 287 288 290 292	321 325 322 328	576 579 580 592 583	640 650 640 650 643	332 336 336 330 331		267 268 264 263 269	444 439 423 430 425	136 137 134 127 144	133	43 45 42 41 43	9/19 8/20 8/21 8/20 9/21		6/49 9/49 8/49 9/49 8/49	L1 L1 L1 L1	KY HBE HBE HBE
1023 1023 1025 1027 1028	50 48 49 52	292 287 287 297	322 326 334	583 582 589 597	641 640 652 657	324 333 354		250 268 280	465 433 441 419	132 136 135	310 131 133 132	41 45 45 44 46	8\$20 9\$21 9\$21	m	9/49 7/49 8/49 9/49 8/49	L1 L1 L1 L1	HBE HBE HBE HBE
1029 1030 1030 1035 1037	48 54 52	289 292 298	331 331 331	593 596 598	654	344 341 346		247 268	433	128 135 136 136 133	130 132 138 133 134	45 45 45 47 46	9/18 8/21 9/20 10/21 9/20	f	6/49 6/49 7/49 6/49 8/49	L1 L1 L1	HBE KY HBE FCJ HBE

Table 43. Albacore from the North Central Pacific: Hawaiian Islands (Continued)

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins. Ventral	Ins. Ventral to Ant. Edge Vent	Greatest Body Depth	Length Pestoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Wonth and Year	Gear	Examiner
1037 1037 1039 1040 1040	53 54 53 49 51	286 304 306 287 298	337 338 340 323 383	606 596 608 581 587	649 657 654 647 655	324 344 345 332 344		274 267 260 251 263	454 454 443 455 453	134	119 132 134 128 149	42 47 46 42 48	8/20 8/20 9/20 9/20 9/20	f	4/49 8/49 8/49 9/49	L1 L1 L1 L1 L1	FCJ HBE HBE HBE
1045 1046 1051 1052 1053	55 50 53 57 54	299 296 297 303 291	334 327 329 342 325	592 598 611	657	347 350 350 353 341		275 259 266 277 269	442 420 445 409 430	126 139	131 127 138 127 128	47 47 44 48 43	10/20 9/20 9/21 10/19	m	5/49 8/49 8/49 5/49 9/49	L1 L1 L1 L1	HBE HBE FCJ HBE
1061 1063 1069 1069 1070	57 58 56 57 56	295 306 301 303 300	331 335 338 346 333	599 608 600	670 678 677	350 355 347 350 346		271 269 271 282 269	447 460 464 446 458	144	125 133 140 142 141	47 43 43 49 46	9/20 9/20 8/21 9/20 8/20		4/49 7/49 8/49 7/49 7/49	L1 L1 L1 L1	KY KY HBE HBE
1074 1090 1094 1104 1105	61 62 65 60	305 329 306 311 312	340	602 635 625	689	350 379 366 356 355		272 305 283 295 275	443 485	143 178 143 140 132	143 166 147 140 133	47 46 47 48 48	8/21 9/19 7/19 8/19 9/21	m	9/49 8/49 5/49 6/49 3/49	L1 L1 L1 L1 L1	HBE HBE KY FCJ FCJ
1105 1106 1109 1112 1114		323 320 311	357 346	636 631 637	703 703 705	360 377 368 366 356		291	474	149		44 46 50 47 47	8/21 9/21 9/20 9/21 9/20		3/49 8/49 8/49 9/49 8/49	L1 L1 L1 L1	HBE
1114 1117 1119 1119 1120	68 61 68	312 317	359 350 350	648 637	700 704	365		289 291 289	482 449	146 153 143 140 141	148 144	49 49 46 49 47	4 /	m m	8/49 9/49 9/49 8/49 5/49	L1 L1 L1 L1 L1	JWR HEE HBE HBE KY

Table 43. Albacore from the North Central Pacifics Hawaiian Islands (Continued)

-				·													-
Total Length	Weight	Head Length	Snout to Ins.	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins. Ventral	Ins. Ventral to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. G111 Rakers	Sex	Month and Year	ાક્ષ્મણ	Examines
1122 1122 1122 1123 1125	63 65 66 67 65	317 316 317 319 316	339 352 359	645 650	702 706 710 714 707	365 372 367 371 369		287 289 272 291 288	477 468 478 472 469		145 146 151 159 141	47 50 49 50 48	9≠20 8≠20 8≠20 8≠21 9≠21	m m	9/49 9/49 9/49 8/49 9/49	L1 L1 L1 L1 L1	HBE HBE HBE HBE
1126 1130 1132 1132 1133	66 66 66 66	324 309 313 322 319	351 347 365	646 634 650	728 709 702 705 711	391 361 378 367 377		308 300 297 292 293	473 443 497	143 160	138 152 138 155 155	47 47 47 47 48	8≠20 9≠21 8≠20 9≠20	m	5/49 8/49 5/49 5/49 6/49	L1 L1 L1 L1 L1	KY HBE KY HBE
1133 1133 1134 1135 1135	69 71 68 68 69	330	363 361 350	645 654	716 711 713	377 377 371		295 293 293 297 307	476 461 455	157 146	145 155 150 140 148	49 49 50 47 47	9≠22 9≠20 7≠20 9≠20		6/49 8/49 8/49 9/49 7/49	L1 L1 L1 L1 L1	HBE HBE HBE HBE
1136 1137 1138 1140 1140	65 66 67 72 73	321 325 316 318 324	359 370 352	648 657 649	711 717 704 721 723			284 298 293 307 284	466 467 458 467 462	151 145	136 142 142 144 143	46 49 50 47 49	7≠21 9≠21 9≠21 8≠21	m	6/49 7/49 5/49 9/49 6/49	L1 L1 L1 L1 L1	KY HBE KY HKY
1142 1144 1147 1147 1148	69 72 72	335 328 325 321	374 358 354 365	646 658 650 651 655	727 719 728 728	389 378 387 377		297 311	471 470		145	47	7/20 8/18 8/20 8/21 8/20	m	7/49 8/49 8/49 6/49 5/49	L1 L1	HBE HBE KY KY
1151 1152 1152 1154 1154	72 69 70 69 70	325 328	362 368 353		708 711 713	372 379		289 293	470 458 483	160 151 149 148 154	149 150 143	47 50	7/20 9/20 9/20 8/20 8/21		7/49 8/49 8/49 9/49 6/49	L1 L1	HBE HBE HBE FCJ

Table 43. Albacore from the North Central Pacific: Hawaiian Islands (Continued)

				-	,						ale language of						-
Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsai	Snout to Ins.	Snout to Ins. Ventral	Ins. Ventral to Ant. Edge Vent	Greatest Body Depth	Length Pertoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	Goar	Examiner
1154 1165 1167 1167 1171	71 70 73 75 69	324 331 327 326 326	301 372 361 371 364	654 666 657 673 653	713 742 719 733 735	373 375 377 378 390		298 306 300 301 308	462 486 468 469 455	148	153 141 153 149 152	48 47 50 49 47	8/20 9/20 8/20 9/20	m	9/49 5/49 9/49 9/49 7/49	L1 L1 L1 L1 L1	HBE HBE HBE HBE HBE
1178 1185	75 72		370 377	677 677				308 291			168 135		9/21 7/21		8/49 3/49	Ll	HBE FCJ
		Tai	ble d	44.	Alba	3 C O 7 6	e fro	ວກ ປ	he N	or thi	we st	arn l	Pacifi	C 5 4	Japan		
700	1		,				J 11.					, ,	aciri			1	l na a
768 876 890 894 894	32 30 32 32	244 251 255 254 261	256 284 299 291 303	441 502 519 520 527	501 542 551 559 565	280 290 289		219 239 236 238 230	398 375 387	118	115		10,421 8,420 10,421 8,421		2/49 6/49 6/49 6/49	Pl Pl Pl Pl	FCC BMS BMS BMS BMS
903 903 1013 1027	34 48 51	250 262 288 291	286 287 319 332	529 529 591 612		301 329		227 228 253 264	384 454	104 128	116 104 126 125	40	10/20	m	1/49 2/49 1/49 1/49	L1 L1 L1	FCC FCC FCC
		Ta	ble 4	45。	Blu	əfin			e We Mar			uato	rial P	acifi	ice		
19 7 1 2078	315 ³ 296	5 4 4 563	610 591	1059 1063	1157 1220	594 635	583 610	542 541	354 360	293 318	30 4	47 49	12/23 14/26	f f	7/51 7/51	L1 L1	WVC
		Tal	ole 4	1 6。	Blue	∍fin			e We:			uator	rial P	acifi	ic ₈		
1972 1999 2205	291 310	547 559 599	586 572 642	1058 1059 1172	1197 1216 1310	593 652 674	604 617 676	527 557	390 386 389	337 313 377	324 299 365	49 45 45	12 _≠ 23	f m	7/51 4/51 7/50	L1 L1 L1	TO BMS

Table 47. Bluefin from the Western Equatorial Pacifics
Central Carolinss

Total Length	мезкы	Head Length	Shoat to Ins.	O.S.P.	Shout to Ins Anal	Shout to Ing Venties	Ins. Ventral to Anto Edge Vent	Greatest Body Depth	Length Pertora	Height 2nd Dorest	Height Anal	Dismeter III.	No. GIII Rakers	Ser.	Month and Year	Geas	Branioer
2139 2239 2255	463	582 631 600	624 661 648	1136 1185 1221	1253 1373 1354	649 748 696	632 675 667	550 578	405 405 418	423	331 428 391	45 51 48			7/50 7/50 6/50	L1 L1 L1	BMS BMS BMS

Table 48. Bluefin from the North Central Pacifics
Hawaiian Islands

1740 233 497 1902 376 542	531 950 589 1052	1069 540 560 1184 600 571	0 450 335 7 534 333	268 251 241 236	44 12/24 48	m 10/50 9/51	L1 KY L1 RS
Tab	le 49.	Bluefin from	n the Nor	thwestern	Pacifics	Japan	
510 6.6 156	171 301	333 176	140 93	45 43 46 47 44 51	23	2/49 2/49 2/49 2/49	Gn FCC
530 7.3 165			148 96	46	22	2/49	Gn FCC
531 6.9 163	177 312	346 184	149 91	47 44	23	2/49	Gn FCC
537 7-2 159	170 306	346 178	142 96	51	23	2/49	L1 FCC

Table 50. Bluefin from the Southwestern Pacifics Australia (Frozen specimens measured in Honolula)

678	$14\frac{3}{4}$ $14\frac{1}{2}$	213 208 207	223 226 226 223 230	389 397 393	437 430	238 242 254	182 184 183	145	74 75 73 81 72	69 71 73 75	29 31	11/24	f	12/49 12/49 12/49 12/49 12/49	KE KE KE KE
	16 1/2 1/4 16 1/2 16 1/2	217 219 220		454 407 397	391 441	269 242 272	191 190 187	146 155 147 155 155	85 82 73 70 80	9 3 84 75	31 30	10/21 10/22 13/23 10/22 11/21		12/49 12/49 12/49 12/49 12/49	KE KE KE KE
734 747 754	17		233		1	275	189	160 158 152	99 100 86	86 92		12/23 12/22 11/22		12/49 12/49 12/49	KE KE

Table 51. Australian Northern Bluefin from the Northwestern Pacifics Southwestern Panay Island, Philippines*

Total Length	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anæl	Snout to Ins. Ventral	Total Length	Head Length	Snout to Ins. lst Dersal	Snout to Ins. 2nd Dorsal	Smout to Ins.	Snout to Ins. Ventral
527	145	155	281	325	162	580	157	173	307	343	175
546	136	165	289	330	164	591	154	167	317	356	175
548	146	160	295	332	166	605	162	186	328	370	182
572	148	167	302	343	167	618	171	184	338	397	184
578	155	165	297	346	176	722	190	207	385	423	218

Table 52. Australian Northern Bluefin from the Northwestern Pacific:
Northeastern Panay Island, Philippines*

541	150	168	295	334	176	592	143	165	312	350	155
558	147	153	288	335	160	593	145	153	301	340	170
558	160	166	300	344	182	594	159	165	300	355	181
565	150	157	300	340	165	599	158	170	305	345	180
568	152	150	296	342	172	599	161	170	302	356	180
570 570 570 571 572	142 145 147 161 161	160 152 168 176 172	294 291 308 307 300	334 333 338 340 340	165 162 168 176 182	603 605 608 608	163 169 155 160 164	183 182 168 166 178	314 324 314 325 312	360 365 358 363 362	183 192 177 180 185
575	151	172	300	340	172	€10	150	172	326	360	174
577	160	171	301	352	180	610	154	168	315	362	170
580	140	160	312	345	163	611	163	175	330	372	181
580	151	160	310	346	165	612	158	172	320	365	180
580	152	160	325	345	172	624	172	185	326	371	188
581	140	157	306	336	170	628	182	188	342	377	197
585	146	160	306	350	166	634	163	180	342	376	180
585	150	161	304	350	150	635	166	180	322	366	190
585	153	155	307	354	170	636	171	179	331	372	191
585	158	172	322	345	170	639	177	197	340	382	200
586	146	163	310	345	165	647	166	182	332	365	187
586	156	166	300	342	174	652	170	183	335	392	190
586	160	165	308	356	180	665	180	181	345	397	205
587	145	162	300	342	162	671	186	193	355	409	214
587	164	171	310	350	180	694	175	188	350	395	200

^{*}From the Philippine Bureau of risheries

Table 53. Australian Northern Bluefin from the Northwestern Pacifics
Batangas Province, Luzon, Philippines

Total Length	Head Length	Snout to Ins. 1st Dorsal	Smout to Ins. 2nd Dersall	Snout to Ins. Anal	Shout to Ins. Ventral	Total Lenaty	Mead Length	_ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	Smout to Ins. 2md Dorsal	Spout to Int. Anal	Snout to Ing. Ventral
502 513 516 521 522	138 138 140 140 142	154 150 155 151 151	278 273 279 272 275	309 314 316 311 316	153 159 159 153 165	544 544 545 557 561	149 151 152 152 155	155 162 163 157 170	295 290 291 284 294	331 321 334 330 342	169 162 171 169 170
530 538 540 542 543	146 150 154 147 150	152 159 159 165 149	280 283 285 293 278	319 323 327 324 325	161 166 174 165 173	566 573 576 588 623	154 158 154 159 168	157 165 163 173 180 203	293 300 303 304 331 369	337 348 352 341 374	176 175 179 178 191

Table 54. Australian Northern Bluefin from the Northwestern Pacifics Ragay Gulf, Bicol Peninsula, Luzon*

381 385 388 400 504	106 106 109 109 142	118 115 115 114 152	201 203 207 211 267	226 231 236 240 304	118 120 122 159	536 537 537 539 541	146 143 151 145 147	158 153 159 156 158	280 278 286 275 278	334 325 318 320 320	165 161 166 159 165
508	141	148	267	311	160	543	143	162	285	322	163
517	142	160	280	316	160	543	151	163	283	322	166
518	147	155	281	314	159	545	152	153	282	329	167
518	147	158	272	312	166	549	150	163	282	327	167
520	146	158	285	325	166	550	144	158	289	332	162
523	145	152	276	309	165	550	152	164	285	327	166
526	147	154	272	312	162	551	147	160	292	332	168
530	146	152	281	317	161	554	151	165	294	331	169
531	149	161	281	322	167	555	148	162	288	330	171
532	147	156	276	338	163	562	149	162	295	337	170
532	148	156	282	326	170	562	154	168	302	340	172
5 33	148	161	281	322	167	5 67	151	164	287	331	176
5 33	153	157	282	325	171	582	154	167	307	349	171

Table 55. Australian Northern Bluefin from the Northwestern Pacifics South Sulu Sea, Philippines*

447	129	134	244	271	148	480	140	148	262	291	150
	l		L			transport and Delica					

^{*} From the Philippine Bureau of Fisheries

Table 56. Skipjack from the Eastern Equatorial Pacifics 120° West Longitude

Total Length	Weight	Head Length	Snout to Ins.	t to I Dorsa	Snout to Ins.	Snoat to Ins. Ventral	Ins. Ventral to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Dorsel	Height Anal	Diameter Iris	No. Gill Hakets	Sox	Month and Year	Goar	Examiner
7 64 7 76 789	22 24 24	231	256	486	513 523 531	247 258 262	250 257 264	l	127 123 133	83 99	78 80 93	30 28 28	20/40	f	10/52 10/52 10/52	Li Li	TSH TSH GIM

Table 57. Skippack from the Central Equatorial Pacifics 130° West Longitude

653 667 678 680 684		200 200 200 203 206	233	422 435	451 452 457	219 224 222	219 221 233		108 120 112	71 76 77 75 70	68 72 76 74 65	26 26 21 23 27	17/36 21/38 20/36 20/39	m m m	11/52 11/52 11/52 11/52 11/52	L1 L1 L1 L1	TSH TSH TSH
731 761 791 802 812	20 21 24 25 262	228 234 248 235 247	261 274 275	474 495 505	517 544 545	262 281 286	252 250 253	177 182 181 190 197	126 126 131 128 136	80 82 86 91 90	79 85 85 84 92	27 27 31 29 31	19/42	f m	11/52 11/52 11/52 11/52 11/52	Li Li Li Li Li	TSH GIM TSH TSH TSH
817	26	246	266	501	552	300	276	200	137	89	88	30	20≠37	m	11/52	Ll	GIM

Table 58. Skipjack from the Central Equatorial Pacifice 140° West Longitude

531 703 722		162 211 214	241		475	233 232	250	183 192	107 116	51 78 76	47 70 74	24 23 27	18/37 19/40		5/52 6/52 8/52	L1	JEK DTY WMM
723		215	243	450	483	239			118	84	81		18/38	f	6/52	Tr	DIY
747		224	254	469	509	251	255	193	121	82	78	27	20,439	f	8/52	Ll	MMM
748	20	224	246	462	503		247			86	85	24	,	m	9/52		RS
757		225	256	474	514	250	256	194	119	81	82	28	20/40	ſ	9/52	Ll	MMW
758		231	259	479	517	261		194	128	86	83	29	19/42	f	8/52	Lī	WIM
773		237	268	492	530	262	263		127	86	80	27	19/38	m	9/52	Ll	DLM
788		243	271	497	532	260	263	208	130	93	90	30	21/40	m	9/52	Lı	MMM

Table 58. Skipjack from the Central Equatorial Pacifics 140° West Longitude (Continued)

Total Length	Weight	Head Length	Snout to Ins.	Snout to Ins.	Shout to Ina.	Snout to Ins. Ventral	Ins. Ventral to Ant. Edge Vent	est Bod h	Length Pastoral	Height 2nd Dorsel	Reight Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	Gear	Examiver
789 792 795 796 797	254	240 241 241 245 245	269 273 278	492 498 507 504 497	530 535 542 544 535	268 265 275	251 259 272 288 254	203 208	142	93	92 88 85 85 91		20/41 20/39	m f f f	9/52 9/52 8/52 9/52 9/52	L1 L1 L1 L1	WMM WFR WMM DLM WMM
798 801 802 802 804		244 239 240 245 237	267	499 502 502	544 534 545 536 541	272 263 263 270 268	266 273 260	191 202 197	126 133 127	92 91 91 96	89 85 8 3 83 95	31 29	39/20 20/38 18/40 20/40 19/36	f f m f m	8/52 9/52 9/52 9/52 9/52	L1 L1 L1 L1	DLM WMM WMM DLM
805 808 810 810 819	23½ 24½ 31½	241 239 246 252 250	275 277 278	504 495 508 516 508	549 539 549 555 555	268 269 276	261 272 270	196 210 208	130		86 87 93 89 89	29 29 30 30	18/38 21/38	î m î m	9/52 9/52 8/52 9/52 8/52	L1 L1 L1	RS WFR RS WMM DLM
820		2 5 5	281	522	559	278	278	202	146	96	96	33	20≠41	m	9/52	Ll	WMM

Table 59. Skipjack from the Central Equatorial Pacific: Eastern Line Islands

357 471 494 496 503	101 138 148 147 154	168 170	287 309 302	314 340 325		148 166 151	114	48 68 78 75 75	28 44 50 49	25 39 44 45 47	15 22 22 23 23	20/43 19/40	m f f m	9/52 6/51 6/51 6/51 6/51		DLM FCJ FCJ FCJ FCJ
509 518 520 529 530	152 155 158 157 159	177 178 180	322 325 318	342 357 347	169 172 185 169 178	157 174 168	128 129 137	75 81 88 87	48 54 48 58 57	45 47 46 54 50	23 22 22 25	17≠38 17≠39	f f m f	6/51 6/51 11/50 6/51 6/51	Pl Pl Tr Pl Pl	FCJ FCG FCJ FCJ

Table 59. Skipjack from the Central Equatorial Pacific: Eastern Line Islands (Continued)

				, ,													
Total Length	Weight	Head length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	ţο	Snout to Ins. Ventral	en t Edg	Greatest Body Depth	Length Pectoral	Height 2nd Dorsel	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Nonth and Year	a seed	Examiner
534 534 544 553 570		157 163 163 164 175		326 336 341 345 353	353 362 370 378 388	170 183 185 183 195	173 169 178 188 184	133 129 141 145 143	83 87 84 87 90	55 57 57 55 58	51 54 56 56 55	23 26 24 25 25	19/43 20/39 17/42 18/39 19/40	m m m f m	6/51 6/51 6/51 6/51 6/51	Pl Pl Pl Pl Pl	FCJ FCJ FCJ FCJ
577 577 594 608 610		166 173 176 186 184	191 199 203 208 209	368 378	387 396 413	183 195 195 204 207	193 183 191 199 205	152 150 150 151 147	93 95 100 100	62 61 64 65 67	56 59 61 63 66	24 25 26 26 26	18+40 17+38 20+43 17+38 21+42	m m f	6/51 6/51 6/51 6/51 6/51	Pl	FCJ FCJ FCJ FCJ
613 615 624 630 654		185 185 190 190 194	204 217 218	380 380 388 396 406	405 410 421 423 432	200 208 207 210 206	193 193 205 204 212	156 157 159 158 163	97 102 94 99 109	69 66 64 69 76	63 64 62 60 71	27 26 27 27 26	19/42 17/39 19/40 19/41 19/39	m m	6/51 6/51 6/51 6/51 6/51	Pl Pl	FCJ FCJ FCJ FCJ
679 690 695 700 706	13½ 16½ 16 18	204	238 229 237 242 250	413 433 429 439 449	448 466 472 465 475	230 221 232 241 246	212 233 228 220 229	163 172 176 172 180	113	75 70 78 81 80	73 69 75 81 74	27 26 29 27 27		m f f m m	9/51 8/52 9/51 9/51 9/51	Ll	TC WFR TC TC
736 736 737 740 742	21	221 223 219 224 223	255 244	45 9 45 5	503 496 483 499 497	237	244 237 245	192	120 123 120	77 92 33 89 95		27 29	20≠40 18≠37	m f f m f	10/50 9/51 9/51 9/51 2/50	L1 L1 L1	TC
743 746 748 750 751	25 21	224 228 225	249 255	469 470 470	506 505 509 503 512	246 247 247	248 254 247	188 187 192	119 121 123	89 82 83 84 91	83- 79: 86 77 84		19,/38	m f f	9/51 9/52 11/52 9/51 9/51	L1 L1 L1	III WMM III TC III

Table 59. Skipjack from the Central Equatorial Pacifics Eastern Line Islands (Continued)

										-continuo-no-	Market Million of					-	Action to the China
Total Length	Welght	Head Length	Smout to Ins.	Snout to Ins. 2nd Dersal	Snout to Ins.	Snout to Ins. Ventral	Ins. Ventral t. Ant. Edge Vent		Langth Packing	Height 2nd Dursal	Helght Anal	Diameter Leas	No. Gill Regers	S	Month and Year	G ear	Examinas
753 754 754 754 757	22 20 22 23 21	230 227 223 231 230	263 261 252 252 256	472 465 461 471 468	510 499 501 515 512	257 251 251 262 260	245 244 245 252 249	185 192 195		90 86 90 91 91	86 85 90 83 93	29 28 26 28 30	19≠38	m m f f m	9/51 11/52 9/51 9/51 2/50	Ll Ll Ll Ll Tr	TC III III TC MBS
760 760 763 766 768	23 23 22 23	225 231 229 226 240	247	475 470 475 473 491	511 511	251 279 252 252 264	253 242 248 249	195 191	125 121 118		83 8 6 81 84 82	27 28 28 30		f m f m f	9/51 9/51 9/51 1/51 11/52	L1 L1 L1 Tr	III TC TC JEK
770 774 775 778 781	22 24 22	227 242 234 238 223	259	478	534	250 270 257 270 255	250	193 200 190	132 129	83 93 89 94 90	79 90 91 90 85	30 30	20≠37 19≠40		2/52 11/52 9/52 11/50 9/51	L1 L1 L1 L1	RS III WMM DHB III
784 786 786 786 791	21 22 23 23 24	246 235 239 244 242	277 264 264 279 275	501 487 493 507 498	539 529 525 542 531	268 270 264 263 268	267 255 256 263 255	190 192 194	130 132 125	90 84 94 94 99	87 80 92 92 93	29 30 30 30 30	22/38	m f m f	11/52 8/52 11/52 10/52 11/52	L1 L1 L1	III RS III TO III
795 797 799 801 801	232	242 242 241	266 267 265	498 502 498	536 549 542	271 293 265	261 265	200 194	134 123 131 130 134	87	90 89 85 94 89	30 28	,	f f m m	11/52 11/52 8/52 11/52 10/52	L1 L1 L1	III III RS III TO
801 803 803 805 808	26 24 25 27 24	243 245 245	272	495 498 508	546 541 547	278 279	269 256 257 253 265	189 191 198		95 96 93 103 92	91 95 89 92 91	29 32 31 30 29	20×41	m f m m	11/52 11/52 11/52 11/52 2/52	L1 L1 L1 L1	TO III III III TO

Table 59. Skipjack from the Central Equatorial Pacific: Eastern Line Islands (Continued)

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Srout to Ins. 2nd Dorsal	Snout to Ins.	Snout to Ins. Ventral	Ins. Ventral to Ant. Edge Vent	te Th	Length Pectoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Wonth and Year	Gear	Examiner
811 812 814 818 818	26 ⁷ 29 29 27 29 30	252 245 240 246 242		506 514 501 515 500	545 555 554 558 546	279 271 288 270 282	260 273 270 274	213 214 199 207 211	137 135 130 133 133	99 97 103 100	96 92 95 94 85	30 29 31 29 31		m m m f m	8/52 2/52 9/51 2/52 2/48	Ll Ll Tr	RS TO III TO MBS
821		257	289	518	557	281	271	206	136	99	94	31	19≠35	m	9/52	Ll	DLM

Table 60. Skipjack from the Central Equatorial Pacifics
Western Line Islands

463 466 530 533 545	4 4 6.5	139 166		294 326	317 360	158 191	174	109 110 128 132 135	66 72 89 76 91	43 42 55 49 55	39 36 54 47 59	24 21 25 25 24	17≠37 18≠39 17≠40	m f f m	3/48 3/48 11/50 3/48 11/50	Tr Tr Tr Tr	ORS ORS JWR ORS JWR
551 583 593 614 652	7.5	169 179 180 194 197	199 201 217		391	200 202 229	187 193 199 220	158		56 60 61 65 71	50 58 60 57 72	26 28 26	19/37	f m m m	2/48 11/50 11/50 1/53 11/50	L1 L1 L1 Tr	MBS FCC FCC DC TJR
650 686 728 767 782	24 23	204 200 219 236 239	226 248 265	421 448 490	453 497 521		226	157 168 186 201 196	104 109 115 123 126	72 74 74 90 95	71 73 77 90 90	23 25 25 29 29 29	19≠37 20≠37	m f f	11/50 11/50 11/50 2/48 2/48	Tr Tr	TJR TJR TJR MBS MBS
786 795	25 25	234 243	270 273		1 1			198 194	130 130	90	87 93	28 29	20/39 20/37	f m	2/48 2/48		MBS MBS

Table 61. Skippack from the Central Equatorial Pacifics Phoenix Islands

Total Length	Welght	d Length	Smout to Ins. 1st Dorsal	Smout to Ina. 2nd Dorsal	F4 3 3∂		# E E	Gatatest Boly Denth	Length Felicotal	got and Darswl	Height Amel	Diantier Isla	Gill Rakers		Month and Year	137 137	Braniner
Tot	мел	Head	S15	Sas	Serve Anal	Scout Vacat	A SA	0	Te.f.	rd ri	He.	Dis	° ∑	Sak	N. S.	다. 다음을 것	西
480 481 500 529 549	4 5 5, 5 6 7	140 145 155 163 159	158 159 172 183 187	286 291 305 322 333	323 320 333 351 366	171 158 170 183 171		127	77 77 84 84 84	47 47 56 58	444 445 551		18≠37 21≠41	í° í m m	7/50 2/50 7/50 7/50 8/50	Tr Tr Tr Pl	KY JWR KY KY KY
578, 609 657 666 739	5 10 12½ 13	179 183 197 201 229	207 207 215 222 254	368 373 393 409 471	403 444	198 208 236 224 264	192 211 231 211 245	145 161	94 98 103 115 127	61 65 73 71 92	59 62 70 68 84	28 29	18/37 20/39	m f f m	11/52 8/50 2/50 3/52 6/51	Ll Tr Tr	III KY JWR GIM FCJ
756 760 771 772 774		228 229 224 235 234	258 253 259	48 3 482		254	248 249 266 254 262	190 191 189 196 194	851	75 99 85 89 91	72 85 83 84 90	27 30 27 29 29	19/37 18/39 19/40	f m m m	8/50 11/52 11/52 3/52 3/52	Tr Ll Ll Ll	JER III III TO TO
780 781 783 785 785	24 24	235 236 233 229 244	272 268 268 262 273	500 481 486 488 500	534 526 526 532 538	257 265 267 255 265	258 262 263 269 260	188 200 195 188 195	134 137 136 129 136	96 86 93 85 91	86 86 91 85 89	37 27	21/38 20/37 19/41	m m f f	11/52 2/50 2/50 11/52 11/52	Tr Tr	TO MBS MBS TC
785 787 789 791 795	25 25½	241	270	488 493 494 485 502	522 536 533 537 538	265 260 263 266 267	259 270 262 268 260	196 197 194 208	127 132	91 95 94 92 90	100 94 94 90 87	30	18≠39 22≠40	f f m f m	2/50 11/52 2/50 6/51 3/52	Pl Ll Pl Tr	JWR III MBS FCJ RS
807	26	246	270	497	545	270	259	199	127	89	91	31	19≠36	m	11/52	Ll	III

Table 62. Skipjack from the Western Equatorial Pacifics
Eastern Marshalls

775 762	25 22	233 233	2 5 9	48 7	528 524	254	266 252	197 192	129 129	90 91	91 87	30 30	20/39 21/41	m m	2/52 2/52	L1 L1	GIM TO
-			Maria de la Colonia de		K		4		1		i						

Table 63. Skipjack from the Western Equatorial Pacific: Western Marshalls

					-					10 0'						y	
Total Length	Weight	Head Length	Snout to Ins.	Except to Ins.	Snowb to Ins.	Smout to Inc.	Ins. Ventual to	3 \$03. UMB	Length Porteral	Heleht 2nd Dors	Height Anal	Dismeter Inis	No. Gill Rakers	Sex	Month and Year	Geer	Examiner
407 430 432 436 437	3	128 125 132 131	137 139 143 148 145	250 264 267 272 266	287 295	137 145 139 144 148		93 102 103 107 101	67 65 62 68 70	34 39 36 36 39	32 38 37 35 41	20 21 20 21			*/47 */47 */47 */47 */47		JCM JCM JCM JCM JCM
441 442 448 449 450	4 4 3.5	131 132 133 131 136	150 144 153 151 147	275 272 279 278 273	297 294 307 299 306	146 149 155 147 151		108 107 107 104 106	70 6 7 66 70 70	38 38 40 39 40	39 38 39 38	22 21 22 22 22 22			*/47 */47 */47 */47 */47		JCM JCM JCM JCM
451 455 458 459 460	4	132 135 138 134 137	150 148 157 150 163	278 282 287 279 282	305 306 311 308 309	148 152 155 158 154		100 108 112 111 107	68 68 71 67 68	39 40 40 41 37	36 39 39 38 38	21 21 20 21 21			*/47 */47 */47 */47 */47		JCM JCM JCM JCM
463 464 465 466 468	4 4	137 140 136 136 137	154 154 153 155 157	291 283 283 289 289	312 314 309 310 312	160 157 256 153 158		109 103 109 110 107	72 74 71 70 74	42 43 40 39 43	40 41 40 38 39	22 23 21 21 23			*/47 */47 */47 */47 */47		JCM JCM JCM JCM JCM
470 474 475 481 482	5 4.5	142	165 160 160	293	313 322		159	114 132 121 116 107	73 74 77 72 74	40 47 41 42 41	43 46 40 42 44	21 22 23 22 22		f	*/47 5/51 */47 */47 */47	Ll	JCM TO JCM JCM JCM
488 514 532 540 544	6 7 7.5	155 159 163	163 175 182 182 186	303 322 333 340 345	352 36 7 366	157 172 181 163 181		124 130 134 138 137	78 89 88 85	47 54 50	47 53 50	24 24 25 24			*/47 */47 */47 */47 */47		JCM JCM JCM JCM

^{*}From July 19 to August 26

Table 63, Skipjack from the Western Equatorial Pacific: Western Marshalls (continued)

					-	grown and introd											
Total Length	Weight	Head Length	Snout to Ins.	Snout to Ins.	ţ,	Snout to Ins. Ventral	Ins. Ventral to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Dursal	Height Anal	Diameter Iris	No. Gill Rekers	X 8 S	Month and Year	ಜ್ಞಾರ	Examiner
548 552 559 559 560	7.5 7.5	194 165 169 170 176	187 188 194 195	377 346 350 346 352	377 382 375 383	182 190 190 185 191	184	139 137 134 139 141	86 90 90 89 90	56 52 55 59 53	52 56 55 53 52	24 24 26 27 27	20/38	f	5/51 */47 */47 7/51 */47	L1	TO JCM JCM WVC JCM
561 570 572 587 588	8.2 9	169 172 176 183 181	198 194 196 206 204	352 357 364 365 372	391 389 395 390 405	183 195 195 196 198	197	142 144 145 150 158	97 88 93 93 94	61 54 53 68 54	62 54 55 67 55	24 26 26 27 27	20/39	m m	5/51 */47 */47 7/51 */47	L1	TO JCM JCM WVC JCM
592 593 593 598 602	10 9.8	179 182 183 180 188	202 209 203 200 216	373 379 368 372 377	401 406 390 412 407	199 193 201 201 202	196 207 184 199	146 159 148 149 156	101 99 100 98 92	34 69 74 59 63	62 66 66 59 63	26 25 26 27 27	19/37 17/35	m f m	5/51 5/51 7/51 */47 8/51	L1 L1 L1	TO TO WVC JCM WVC
615 619 632 633	9	192 190 191 195 197	220 219 219 223 220	391 390 394 403 390	419 425 423 427 419	202	215 209 210	151	97 102 103	70 69 67 74 68	68 70 65 69 63	26 25	19 / 38	f f m m	5/51 5/51 5/51 5/51 7/51	L1 L1 L1 L1 L1	TO TO TO WVC
635 638 641 642	13,5	203 193	220 226 220			210 217 213	210 218	166		74 75 74 70 70	71 68 71 69 73	27 27	20/38	f f m m	5/51 7/51 5/51 */47 5/51	L1 L1 L1	TO WVC TO JCM TO
644 652 656 657 659	14 13 $\frac{1}{4}$	197 200 206		408 410 419	436 434 442 443 442	212 217 220 214	214	162		70 68 70 72 79	63 68 71 69 74	28 28 30		m m f m	7/51 5/51 */47 5/51 7/51	L1 L1 L1 L1	

*From July 19 to August 26.

Table 63. Skipjack from the Western Equatorial Pacific:
Western Marshalls (continued)

Total Length	Weight		Snout to Ins. lst Dorsal	Snout to Ins.	Smout to Ins. Anal	Snout to Ins.	Ins. Ventral to Ant. Edge Vent	Grestest Body Depth	Length Pectoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	24 to 1-12)	Examiner
660 6 64 669 670 6 7 2	14	201 202 202 206 203	228 230 234 234 227	413 419 420 428 426	444 447 450 461 464	225 219 224	223 225	169 169 170 176 167	103 109	74 67 74 71	73 66 72 76	26 27 28 28 26	19/36	m m f	5/51 */47 7/51 5/51 */47	L1 L1 L1	TO JCM WVC TO JCM
675 682 686 698 708	15 16 165	199 207 211 209 214	225 233 236 235 246	422 434 433 442 445	460 462 465 479 478	223 227 232	232	160 167 181 173 180	112 112	69 71 82 76 84	69 69 81 74 80	25 28 27 27	17/38 19/40	m f	*/47 */47 8/51 */47 9/51	L1	JCM JCM WVC JCM WVC
718 720 732	18,5	216 220 220	244		487 497 494	288 238 239		177 188 181	125 121 120	81 85 77	78 82 74	30 29 30			*/47 */47 */47		JCM JCM

Table 64. Skipjack from the Western Equatorial Pacific: Eastern Carolines

535 541 546 549 550		161 168 162 168 171	192 183 192	327 345	363 356 372	182	175 177 174	135 137 136	87 83 88	52 62 50 62 55	51 60 46 60 52	21 26 25 26 28		m f m m	4/51 8/50 5/51 5/51 4/51	L1 L1 L1 L1	TO BMS TO TO
552 553 553 557 561	7.3	171 168 170 169 173	189 187 200	342 342 354	371 369 375 374 376	185 188	175 183 182	133 135 138	88 91 88	59 61 56 55 60	56 51 59 55 59	27 23 24 24 25	18/35	f f m	6/51 4/51 8/50 4/51 4/51	L1 L1 L1 L1	WVC TO BMS TO TO
573 581 582 583 583	8.6 8.8		205 280 202	365 364 358	389 396 396 387 393	195 220 193	196 191	149 150 142	98 91	65 60 68 66 75	61 60 63 59 59	25 28 28 25 25			4/51 4/51 6/51 6/51 4/51	L1 L1 L1 L1	TO TO WVC WVC TO

^{*}From July 19 to August 26.

Table 64 Skipjack from the Western Equatorial Pacific: Eastern Carolines (continued)

							um erre men triber			and the same of	at an a war to make a	ga mente at mente		-			#DeeCoudenico
Total Length	Weight	Head Longth	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins.	Snout to Ins. Ventral	Ins. Ventral to	Greatest Body Depth	Length Pectoral	Height 2nd Dersal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	Gear	Errui del
583 589 590 608 608	10녍	180 179 178 185 186	206 208 207 210 212	367 371 373 376 384	394 398 400 405 412	193 195 197	200 201	144 145 152 156 149	95 93 96 97 100	62 65 64 69 70	62 66 61 67 69	26 26 26 26 25	18≠36	m f m f	4/51 4/51 4/51 6/51 5/51	L1 L1 L1 L1	TO TO TO WVC TO
609 616 617 621 622	103	187 189 187 192 190	221 220 208 216 213	388 384 389 387 393	419 411 415 412 417	202 205 204	205 197 196	154 159 155 162 162	100 100 102	67 72 70 70 66	61 69 66 71 65	26 27 24 27 26	18 / 40	f f m m	5/51 6/51 4/51 5/51 5/51	Ll Ll Ll Ll	TO WVC TO TO
624 636 638 645	13 12 3	191 195 195 198	216 224 221 220	393 399 405 401	419 429 432 435	209 212		170	108 106	77 80 78 70	72 75 74 70	27 27 26 26	18/39 17/36 18/34 20/36	m m m	6/51 6/51 6/51 5/51	L1 L1 L1	WVC WVC WVC TO

Table 65. Skipjack from the Western Equatorial Pacific: Central Carolines

522 530 531 544 545	6 7	159 170 163 169 173	184	{	361 369		179 179	130 134	81 85	51 59 53 63 62	50 57 54 54 54	22 26 29	18/38	f m m	4/51 4/51 4/51 6/50 6/50	L1 L1 L1 L1	TO TO TO BMS BMS
551 569 571 577 590	? 8 8	172 169 180 178 181		350 350 360 370 365			181		89 96	57 61 60 61 66	55 58 59 59 63	25 28 24		m f f m	4/51 4/51 4/51 4/51 4/51	L1 L1 L1 L1	TO TO TO TO
603 615 799	12	185 191 240	216 218 270	380 392 501	410 424 550	210	210	161	98 101 137	63 66 105	60 65 98	28		f f	4/51 4/51 6/50	Ll Ll Ll	TO TO BMS

Table 66. Skipjack From the Western Equatorial Pacific: Western Carolines

Total Length	Weight	Head Length	Snout to Ins.	4	Snout to Ins.	Swout to Ins.	Ins. Ventral to Ann. Edge Vent	+ 5 00 44	Length Partocal	Height Ond Dorsal	Heigh Amei	Djameter Iris	No. Gill Rakers	Sux	Month and Year	Gear	Bหลุกฏิกราช
498 496 517 525 529	4 .	146 150 161 157 160	162 169 177 183 183	303 307 330 329 333	333 333 353 351 357	164 168 180 176 179		121 123 140 125 133	75 80 80 78 80	45 46 50 45 46	37 45 52 40 48	21 23 23 23 23	19/37 18/37 19/35 18/37 19/37	m m m m	5/48 5/48 5/48 5/48 5/48	Pl Pl	ORS ORS ORS ORS
533 536	6.5 7.6	161 163	179 187	332 337	359 366	180 185		132	86 82	48 48	48 47	24 25	19/38 18/38	m f	5/48 5/48	Pl Pl	ORS ORS

Table 67. Skipjack from the Mortheastern Pacific

506 4 2 507 6 2 536 6 2 554 8 579 8	149 156 161 167 172	171 182 183	309 313 332 350 356	334 341 340 378 389	167 130 195	122 134 124 139 137	78 79 78 87 89	49 49 50	43 46 49 49 52	24 21 22 23 15	18/39 18/39 19/41	m m m	12/50 5/49 5/49 5/47 9/52	Tr Pl Tr	HHE a GWM b GWM b c JCM b
599 11 621 11 631 640 13½ 669 15	190	214 208	398 395 403	399 428 427 425 454		155 152 161 162 171	92 101 98 101 108	57 61 65 70 70	58 56 67 66 69	24 24 26 26 26	17/37 18/38 19/38	m m f	5/49 5/47 5/49 5/49 5/49	Pl Pl	GWM b c b b GWM b

a. Southwest of Balenas Bay. Baja, California

b. Off Guatemala

c. Off Costa Rica

Table 68. Skipjack from the North Central Pacific: Hawaiian Islands

				-											1		nomero nomo
Total Length	Weight	Head Length	Snout to Ins. lst Dorsal	Snout to Ins. 2nd Dorsal	Smout to Ins.	Snout to Inc. Ventral	Ins. Ventral tr Ant. Edge Vent		Length Feeting	A-fght 201 Dusk	Belyby Ansl.	Digmetes Ini	No. Gill Redere	Sex	Mersh and Te	Gear	是 宋母郎太武帝宣。
207 240 240 247 260	.29 .43 .43 .45 .56	58 66 67 66 73	68 76 77 76 83		138 154 159 161 170	63 76 75 77 81	75 82	50 53 44 57	22 28 29 31 32	13 14 15 16 20	12 16 16 15	7 12 13 12 15	20 ≓43		7/49 12/51 12/51 12/51 12/51	P1 P1 P1 P1	KY III HY III
265 326 327 330 336	1.5 1.5	77 94 95 97 95	91 113 108 111 111	161 204 197 204 203	175 217 217 226 221	106 109	85	63 83 85 80 82	34 44 43 48 46	17 23 28 25 26	17 26 25 23 25	14 16 16 15 16	18≠38 18≠39 18≠39	m m	10/51 4/49 4/49 4/49 5/49		FCJ KY FCJ FCJ FCJ
356 358 358 360 362	2	106 105 107 106 105	122	215 221	237 237 236 239 239	119 119		91 94 96 92 94	50 50 56 50 46	52 29 31 31 32	30 30 30 28 29	17 17 17 17	19/39 18/36 19/37	m m	7/49 7/49 7/49 5/49 7/49	P1 P1 P1 P1	HBE HBE KY HBE
367 371 375 381 385	2 ½ 2 2 2	110 107 110	120 131 126 126 134	229 224 232	245 246 251 254 255	123 124 125		89 95 93 99 100	55 52 52 55 55	34 39 34 32	27 33 30 38 31	17 18 17 17	19/35 18/38 18/28	f	5/49 9/49 7/49 5/49 7/49	Pl Pl Pl	KY HBE HBE FCJ HBE
		105 116 121	120 135 138		268 265 274	125 118 129 133 136		97 98 97 106	56 58 60 57 58	38 32 39 36 38	32	17 18 18	19≠37 9/30 18≠39 19≠38 17≠35		9/49 7/49 9/49 7/49 6/49	Pl Pl	HBE HBE HBE HBE HBE
410 410 413		120 127	137 144 140	282 247 252 254 256	270 276 275	151 135 138 137 141		112 100 113 108 106	69 61 58 61 62	37 39 32 30 40		29 20 21	17≠39 18≠38 20≠39 18≠36	f f	8/48 9/49 8/48 9/48 7/49		HHE HBE HHE HHE HBE

Table 68 Skipjack from the North Central Pacific.

hawaiian Islands (continued)

					1				~							r mesmono	,
Total Length	Weight	Head Length	Snout to Ids. 1st Domas1	Spout to Ins. Pad Dorsel	Encut to Ins. Anal	Shout to Inc. Ventral	ing. Ventral to Att. Edge Vegi	Greatect Body Derei	Length Pectors.	Haight and Dornal	Height Anal	Diameter Inte	No. Gill Rakers	Sex	Month and Year	0 883.	Examiner
427 428 428 429 431	4 3 4 3 3 3			263 262 222 260 269	282 283 281 292 292	144 141 143 145 140		118 105 107 110 113	64 63 65 65 65	33 43 32 42 45	33 40 33 38 37	21 20 20 20 20	18/38 18/38 17/39 17/39	m m f f	9/48 7/49 8/48 7/49 5/49	Pl Pl Pl	HHE HBE HHE HBE FCJ
434 434 434 435 436	3 1 2 3 4 4 1 . 8 4	128 126 130 125 126	145 151 144 152 151	263 265 263 267 269	288 291 289 281 291	144 139 145 138 140		109 109 104 115 116	61 66 67 64 59	39 38 34 40	36 36 30 37 41	19 21 21 18 20	14/38 19/40 17/40 18/37 18/40	f m m m	6/49 6/49 9/48 5/49 6/49	Pî Pl Pl	KY KY HHE FCJ HBE
441 446 448 453 456	4 3.5 4 4 4	129 127 134 135 133	151 153 153 151 151	274 275 274 272 280	294 299 300 296 302	147 141 147 153 149		105 110 114 116 105	65 66 72 70	34 40 42 39 38	34 38 42 37 35	21 19 21 22 23	19/41 19/38 20/37 18/35	f m m	9/48 4/49 5/49 8/48 9/48	Pl Pl	HHE FCJ KY HHE HHE
456 457 459 459 460	4 4년 5	137 137 135 139 135	157 160 161 160 162	279 286 286 288 281	303 301 308 303 311	151		117 118 121 118 121	68 71 67 76 71	48 44 45 44	43 43 40 37 39	20 21 21 23 21	21/39 17/39 18/38 20/42 19/39	f m m m	7/49 4/49 5/49 9/48 5/49	Pl Pl	HBE FCJ HHE FCJ
463 466 467 468 470	4 ¹ / ₄ 5 4.5	136	159	287 284	320	150 153 154 152 154		116 115 117 126 120	73 67 70 70 71	38 46 47 43	37 43 42 42	21 20	19/41 18/36 20/38 18/37 20/39	m	8/48 9/49 6/49 4/49 5/49	P1 P1 P1	HHE HBE KY FCJ FCJ
470 473 473 474 476	5	141 138 142	154 159 159 167 157	298 288 289	320 317 316	153 159 154 160 158		117 115 122 121 115	72 72 68 73 69	38 42 41 41 44	33 43 40 44 40	22 20 21 21 22	18/38 18/38 19/38 19/39	m f m	9/48 5/49 5/49 5/49 5/49	Pl Pl Pl	HHE KY FCJ KY KY

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Table 68. Skipjack from the North Central Pacific: Hawaiian Islands (continued)

							-										er === (m ==)
Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to las. Ventral	Ins. Ventral to Ant. Edge Vent	Greatest Body Depth	Length Pertoral	Height 2nd Dorsal	Height Ansl	Diameter Iris	N., Gill Rakesu	S S	Month and Year	Goar	Examiner
478 479 482 484 485	5 4°5 5 5 5 5	140 144 141 141 148	166 165 163 166 173	293 294 295 297 301	321 326 323 323 316	154 169 154 157 161		122 123 130 127 124	72 72 72 68 74	47 45 44 46 46	44 45 44 44 45	21 20 18 20 21	19/37 18/40 17/37 19/40 19/36	m m f f	6/49 4/49 5/49 5/49 5/49	Pl Pl	KY FCJ KY FCJ KY
485 487 489 489	54 6 6 5.5 6	142 140 143 144 145	167	297 302 303 302 300	329 325 325 334 329	161 160 161		127 123 130 123 131	75 75 75 74 71	50 39 40 43 48	44 39 33 42 48	21 23 23 22 22	19/43 18/37 19/39 19/42 18/39	m m f m	6/49 8/48 9/48 5/49 6/49	P1 P1	KY HHE HHE FCJ HBE
490 492 493 496 497	5.5 5.1 5.1 6 5	149		305 304 301 304 309	338 328 328 332 335	160 165		133 121 126 127 125	75 75 72 76 75	43 38 47 52 43	47 36 44 52 39	22 24 21 21 21 24	18/39 19/38 19/36 21/39 18/36	m f m f	4/49 8/48 5/49 7/49 8/48	P1	KY HHE FCJ HBE HHE
497 504 505 508 514	5½ 6	150 150 152 152 151	173	307 311 310 317 313	336 332 334 348 347	162 166		119 126 118 129 132	69 77 77 76 74	41 46 54 50	38 43 48 50 51		20/38 17/39 18/38 19/41 19/38	f m m m	2/48 8/48 7/49 8/49 8/49	Tr Pl Pl Pl Pl	MBS HHE KY HBE HBE
516 518	6.5 6.5 64	153 153 159	179 178 181 176 177	323 316	349 349	173 173 164 178 170		144 133 130 132 130	77 75	50 54	45 53	23 23 23	20/40 19/40 20/40 20/40 18/37	f	6/49 8/49 5/49 7/49 8/49	Pl	HBE HBE FCJ HBE HBE
519 523 524 530 531	7 6호 7	157 155 153	172 179 180 175 180	321 321 325	351 354 356	170 173 174 174 175		133 139 131 124 134	89 8 0	51	41 46 53 42 51	22 24 25	21/40 18/40 21/39 18/38 17/38	m f m m	9/48 5/49 7/49 8/48 6/49	Pl Pl Pl	HHE FCJ HBE HHE KY

Table 68. Skipjack from the North Central Pacific: Hawaiian Islands (continued)

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins.	Snout to Ins.	Ins. Ventral to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	Gear	Examiner
533 533 536 540 540	7 7.5 7.5 7.5	159 159	181 180 180 187 177	338 327 333	360 360 363	176 173 177 179 184		140 140 139 142 141	77 81 84 82 85	62 51 60 57 48	55 51 57 52 47	22 22 24 23 22	19/39 19/37 19/37 18/37 18/41	f f m	7/49 5/49 7/49 8/49 9/48	Pl Pl Pl	HBE KY HBE HBE HHE
545 546 549 552 559	7 6 8 8 8 9	154 161 163	184 175 187 190 190	317 339 344	347 368 371	180		138 130 142 142 151	80 76 83 85 89	61 55 56 60 53	51 56 60 51	23 23 23 25 25	21/40 18/40 20/43 19/39 18/38	m m m f m	7/49 6/49 6/49 8/49 5/49	Pl Pl Pl Pl	HBE KY HBE HBE
560 565 566 568 570	81 9.5 8 9.5 8	169	191 194 198		379 389	185 190 196 187 190		145 143 146 152 138	85 90 95 87 90	63 54 57 62 59	56 51 56 56 58	23 25 21 24	20/38 19/36 18/36 19/37 18/40	m m m f m	7/49 9/48 1/50 5/49 1/50	Pl Tr Pl Tr	HBE HHE MBS KY MBS
574 581 584 589 596	10 10 9½ 11 11		198 198 201 208 206		403 387 402	193 191 189 198 199		154 152 146 155 166	92 95 87 92 90	66 61 64 65 59	65 60 60 62 59	25 22 24 25 23	20/39 19/40 20/39 17/38 19/39	m m m f m	9/49 5/49 9/49 5/49 5/49	Pl Pl	HBE KY HBE KY FCJ
611 613 618 620	9½ 11 10 12 12½	180 182	208 208 216 219 213	377 379 385	415 408 426	196 197 210 206 204	195	154 162 152 169 174	95	63 67 67 70 73	61 63 65 69 67	24 23 24 23	18/38 18/36 17/40 18/38 20/37	f	2/50	Pl Pl Tr Pl Pl	KY HBE JWR HBE HBE
633 638 639 640	12를	189 192 195 195	227	395 3 99				168 175 168 167	97 106	73 73 77 73	71 73 73 69	26 25 26 26	19/38 19/38 19/39 20/39	m	8/49 6/49	Pl Pl Pl Pl	HBE HBE KY HBE

Table 68. Skipjack from the North Central Pacific: Hawaiian Islands (continued)

					THE R. P. LEWIS P. L. L.		-	-		national and the							Marketon Tolk
Total Length	Weight	Head Length	Sabut to Ins. lst Dorsal	Spout to Ins. 2nd Dorsal	ţ,	Snout to In Ventral	Ins. Ventral to Ant. Edge Vent	et B	Length Pestingal	Height 2nd Dorsal	Borren Ander	Dismeter lais	No. Gil Barers	SOF H.	Month and Tear	Gea	Beamly
643 652 660 661 670	15 13½ 15 15¼ 16½	192 194 193 201 199	222	397 408 407 418 413	431 443 444 452 447	214 214 215 222 219		174 171 165 172 171		77 80 75 75 77	72 81 70 72 72	26 26 24 27 25	21/39 20/39 19/37 19/38 18/40	m m f f	8/49 8/49 5/49 6/49 5/49	Pl	HBE HBE KY KY FCJ
672 678 686 687 690	16½ 17 15 17½ 17½	203	236 238	421 428 425 432 427	468 471 457 467 472	223 226		180 175 177 184 184	107 109 110 116 106	77 83 86 80 74	73 72 82 80 72	27 26 26 26 26	19/37 19/39 21/40 18/38 19/39	f f m m f	7/49 5/49 8/49 6/49 5/49	Pl	HBE FCJ HBE HBE KY
691 692 692 693 695	17년 16년 18 20 18	205 202 208 213 204	243 244	425 435 432	469 462 471 459 474	226 226 232 223 229		181 181 181 193 180	105 107 112 114 106	77 82 81 90 80	77 80 79 85 73	26 26 25 26 26	20/38 21/39 20/40 17/38 20/43	m f f m f	6/49 7/49 6/49 6/49 5/49	Pl Pl Pl	FCJ HBE KY KY FCJ
695 696 699 700 700	18 ³ / ₄ 17 18		2.44	427 442	469 462 470 469 472	231		182 192 179 182 179	116 112 111	87 86 85 81 81	82 79 74 78	28	19/37 19/40 19/39 18/38 18/36	m m f f	7/49 6/49 7/49 6/49 6/49	Pl Pl Pl Pl	HBE HBE HBE KY KY
703 705	18 19 18 17½	209 214 211 210	253	443 435 445	483 478 473	231 231 234 233		190 184	116 109 116 111 112		79 81 78 83 81	25 27 26	20/38 22/38 19/39 19/38 19/40	m f f	7/49 6/49 6/49 7/49 6/49	Pl Pl Pl Pl	FCJ HBE KY
707 708 709	18 18,5 18 <u>1</u> 20 <u>2</u> 19	208 212 211	236	441 443	476 471 474	227 232 235 227 234		181			78 77 87 86	27 26 27	21/39 20/39 19/40 18/39 18/37	f	6/49 6/49 7/49 5/49 6/49	Pl Pl Pl	KY FCJ HBE KY KY

Table 68. Skipjack from the North Central Pacific: Hawaiian Islands (continued)

-	1			-		7			ere en overheid	ett mar mangeng je							-0-0
Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Shout to Ins. 2nd Dorsal	Snout to Ins.	Shout to Ins. Vertiral	Ins. Ventral, to Ant. Elga Vens	Greathat Boll	Length Pervosa	Heagat Ini Dorsal	Menght Anal	Dismeber Iris	No. Gall Rekers	Sex	Month and Year	(न वश्र	Examiner
710 712 713 713 715	20½ 18,5 18½ 19½ 19	216 212 212 211 211	251 240 252 241 249	448 448 455 442 443	485 481 482 481 469	238 235 231 233 227		191 184 185 189 182		80 84 77 78 86	76 78 77 78 80	25 26 27 27 25	18/38 18/36 19/38 18/37 20/40	m m m m	6/49 6/49 6/49 6/49	Pl Pl Pl Pl	KY FCJ KY FCJ KY
715 716 719 720 720	19\$\frac{2}{5}\$ 18.5 18 18\frac{1}{2}\$	206 215 212	241	454 447 445 445 437	480 478 480 485 481	225 235		190 184 185 182 182	115 114 111 112 115	85 74 85 82 90	83 75 82 84 86	26 26 25 25 26	20/37 22/42 18/35 19/40 19/39	f m f f m	6/49 5/49 6/49 6/49 7/49	Pl Pl Pl Pl Pl	KY HBE KY HBE
722 723 723 723 723	20 19 19 20 20 21	211	255 249 240 247 250	456 453 445 451 446	487 489 485 480 491	240 235 238 231 234		183 184 192 185 190	116 116	92 87 87 84 87	87 84 82 80 83	28 27 28 26 28	21/39 18/40 19/38 18/40	f f m f	6/49 6/49 6/49 6/49 10/49	Pl Pl Pl Pl Pl	KY HBE HBE KY JWR
725 727 728 729 729	20 21 ½ 20 20½ 205 205	217 217	251 252 249 249 265	449 459 456 448 463	491 491 498 486 491	236 238 242 240 245	247	195 201 183 191 195	120 126 120 118 114	85 75 85 99 86	86 77 80 88 77	27 27 27 26 27	19/38 19/36 21/39 21/40 19/41	m f f m f	6/49 5/49 10/52 7/49 6/49	Pl Pl Pl Pl	HBE HBE TO HBE HBE
738 739 743 746 747	20분	221	257	460	504 499 504 510 511	247 247 247		194	112 119 123 116 117	79 92 79 87 85	78 79 74 85 82		19/38 18/41 19/36 18/37	m m m m	5/49 6/49 1/48 6/49 5/49	Pl Pl Tr Pl Pl	HBE HBE MBS KY KY
747 749 750 752 754	23 \frac{1}{4} 24 22 \frac{1}{2}	219	251 264 256 254 249	457 470 469 464 464	509 510 505	249 251 251 245 246		201 198 194	122 122 122 110 116	89 87 85 79	83 82 89 87 81	27 28 30 26 27	20/40 21/40 20/40 18/38	f f f	6/49 6/49 5/49 5/49 6/49	Pl Pl Pl Pl	KY KY KY KY FCJ

Table 68. Skipjack from the North Central Pacific: Hawaiian Islands (continued)

Total Length	Weight	Head Length	Snout to Ins.	Snout to Ins.	Snout to Ins.	Snout to Ins. Ventral	Ins. Ventral to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sec. Sec.	Month and Year	Ges.	Esaminer
754 756 757 761 761	22,5 25 24,5 23 25	219 232 224 222 223	248 262 261 250 256	469 478 481 467 472	506 507 527 512 514	243 248 247 241 247		197 209 206 190 210	117 122 118 121 115	86 93 89 101 79	84 86 80 95 73	26 28 28 28 27	19/36 19/40 19/40 18/39 18/37	m f f f	5/49 5/49 5/49 10/49 5/49	Pl Pl Pl	KY FCJ FCJ JWR FCJ
762 762 765 766 767	23 245 261 251 214	223 227 234 231 225	259 258 269 261 264	468 474 487 474 481	515	246 254 252 254 244		197 206 212 202 192	123 116 125 120 128	95 86 94 95 91	90 90 89 93 90	27 27 29 29 29	19/36 20/39 20/42 20/39 18/38	m f m m	6/49 5/49 5/49 6/49 6/49	Pl Pl Pl	KY KY FCJ KY KY
767 767 771 772 772	22½ 23,5 24 23 25	223 221 232 227 228	262 258 265 259 257	471 480 482 476 480	518			191 201 194 194 201	114 119 124 122 125	96 82 93 91 93	96 79 89 86 89	29 28 28 27 30	20/41	m f m m	10/49 6/49 6/49 6/49 5/49	Pl Pl Pl Pl	JWR FCJ KY KY FCJ
772 774 775 777 778	25 1 25 27 1 26 28 2 2 8 2 2 2 2 2 2 2 2 2 2 2 2 2 2	230 229 234 227 233	262 265 258 263 275	489 482	530 523 519 521 522	252 262 255		200 206 211 205 212	130 124 130 119 134	92 93 94 90 106	90 87 96 90 97	28 29 28	20/40 18/38 19/38 19/41 19/41	f m m f	6/49 6/49 6/49 6/49 10/49	Pl Pl Pl Pl Pl	FCJ FCJ KY FCJ JWR
783 783 784 785 785	25 26½	237				232 266 264		210	131 126 128		88 89 98 95	32 28	18/37 18/40	f m	5/49 5/49 10/52 5/49 6/49	Pl	KY
785 786 789 791 792	26 27	233 231 231	269 273 268 269 269	490 484 489	541 535 534	259 258 253 255 259		211 213 210	124 129 119 121 129	90 91	92 82 84 91 90	29 28 28		f m m	6/49 5/49 5/49 5/49 5/49	P1 P1 P1 P1	FCJ KY

Table 68. Skipjack from the North Central Pacific: Hawaiian Islands (continued)

	1	Ī	1	1	1	1	1)	1				1		,		
Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins.	Snout to Ins. Anal	Snout to Ins.	Ins. Ventral to Ant. Edge Vent	्र १८० १	Length Pertoral	Height 2nd Dursal	Height Anal	Diameter Iris	No. Gill Rakers	ХөХ	Month and Year	Сеаг	Examiner
793 794 794 795 797	26½ 27 28½ 28 28	234 234 240 236 232	265 265 268 274 269	494 492 493 488 496	542 537 541 533 534	259 262 265 263 255		207 220 215 208	129 130 132 125 123	100 94 100 101 107	91 91 103 96 96	29 28 29 30 29	20/39 20/41 19/39	m m m	5/49 5/49 9/49 6/49 6/49	Pi Pl Pl Pl	KY FCJ HBE HBE KY
798 799 799 801 801	29 275 28 28 28 28	239 235 238 237 239	274 266 275 266 275	505 500 498 557 504	552 542 535 549 540	266 260 263 259 262		211 207 215 216 213	131 128 129 127 129	95 92 105 89 93	91 81 95 88 90	29 29 28 28 29	19/40 19/41 16/39 19/40 18/40	f m m m	5/49 5/49 6/49 8/48 6/49	P1 P1	FCJ FCJ HBE HHE HBE
802 806 809 814 814	26,5 29 24½ 28 30¼	233 236 240 232 240	268 274 276 272 271	498 509 493 507 500	548 552 531 548 556	259 264 269 257 271		205 219 206 217 213	125 121 120 124 127	94 89 98 87 97	89 88 90 86 93	28 27 30 28 28	20/41 19/37 21/38 18/37 20/36	f m m m	6/49 5/49 7/49 5/49 6/49	Pl Pl Pl	FCJ KY HBE FCJ KY
816 819 820 820 821	26 29.5 29.5 30 30	244 245 243 246 238	269 279 281 284 269	503 507 510 524 502	549 555 559 551 545	270 271 274 268 259		209 212 209 223 217	133 130 137 137 131	101 95 104 96 95	97 99 98 103 88	28 29 30 28	21/40 19/40 17/42 21/39	m m m	7/49 6/49 6/49 8/49 5/49	Pl Pl Pl Pl Pl	HBE HBE HBE KY
826 834 835 845 877	255 39 31 2 32 35	250 246 253	288 283 278 285 285 285	522 517 522 519 542	554 564 564 578 588	276 281 273 282 287		227 213 220 218 231	132 125 131 135 143	103 102 106	94 96 102 100 110	30 31 30 30 31	20/41 20/41 20/41 19/38 22/39	m m f f	6/49 5/49 6/49 6/49 8/49	Pl Pl Pl Pl Pl	FCJ KY HBE HBE HBE

Table 69 Skipjack from the Northwestern Pacific:
Marianas

421 3 423 3 427 3 429 3 429 3	5.2 5.4 5.3	127 129 126	144 148 148	263 267	292 281 286	137 138	108 107 112 111 112	65	36 35 36 37	35 34 36 35	20 19 20 20 20			6/49 6/49 6/49 6/49	Pl Pl Pl	FCC FCC FCC FCC
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Table 69 Skipjack from the Northwestern Pacific: Marianas (continued)

Total Length	Welght	Head Length	Snout to Ins.	Shout to Ins. Zm. Direal	្ណ		Ins. Ventral to Ant. Eige Vent	Urestast Buir Derib	Length Perfore	Height Zm. Dorsal	Height Ansi	Jumeter Irla	No. Gill Rakera	<u>ت</u>	Wortz and Toar		Examinate
430 431 435 436 439	34 3.2 3.1 3.5 3.3	128		265	283 289 293			109 106 104 114 104	64 65 66 65 66	36 36 36 38	37 36 35 36	20 21 20 21 19			6/49 6/49 6/49 6/49	Pl Pl Pl Pl Pl	FCC FCC FCC FCC
440 441 443 444 444	3.5 3.4 3.6 3.5 3.6	133 131	150 148	272 271 275 271 275	298 296 301 299 298	146 148 146 147 147		113 107 109 110 113	67 69 69 68 70	38 37 37 37 41	39 36 40 37 38	20 21 21 20 22			6/49 6/49 6/49 6/49	Pi Pl Pl Pl	FCC FCC FCC FCC
446 446 446 447 451	3.6 3.6 3.8 3.4 3.6	136 135	151 156	279 278	297 299 294 298 303	144 148 144 149		112 114 110 110 113	9 6 5 5 5	39 40 39 40 41	36 38 37 39	21 20 19 22 21			6/49 6/49 6/49 6/49	Pl Pl Pl Pl	FCC FCC FCC FCC
452 453 456 456 456	3.8	134 134 135	152 153 151 155 155		306 304 308	148 149 151 149 152		112 113 114 114 125	69 72 67	38 41 41 39 42	38 42 39 38 42				6/49 6/49 6/49 6/49	Pl Pl Fl	FCC FCC FCC FCC
468	4.1 4.1	138 140 140	157	286 284 288	306 308 319	151 153 153 156 156		109 116 118 116 119	65 71 69 68 74			2			6/49 6/49 6/49 6/49	Pl Pl Pl	FCC FCC FCC FCC
	4,4 4,3 6	146		299	330	160 161 165		117 119 132	81 78 78	47 46 47	44 45 48				6/49 6/49 3/49	Pl	FCC FCC MBS

Table 70 Skipjack from the Northwestern Pacific:
Japan

Totel Length	Weight	Head Langth	Snout to Ius. Lat Dorsal	Srout to Ins. 2md Donsel	Shout to Ins.	Smout to Ins.	1 4 01	Greatest Body Depth	Length Pertonal	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	Gear	Evanius:
436 436 439 441 466	3.7 4.0 3.7	132 126	148 150 146	270 267 265	288 295 291 294 305	140 141 145 140 149		113 108 113 110 120	61 59 59 57 65	43 44 44 44 49	43 40 43 38 45	19 19 20 19 21	18/38 21/36 17/34 18/35 18/40		5/49 5/49 5/49 5/49	P1 P1 P1 P1	BMS BMS BMS BMS BMS
474 484 492 527 539	5.2 4.5	144 141 156	167	294 296 300 324 331	316 324 327 354 352	160 155 171		120 128 126 139 147	64 68 68 78 79	45 48 48 55 59	48 43 49 57	20 22 21 22 23	17/37 19/39 20/37 17/35 18/35	f	6/49 5/49 6/49 6/49 5/49	P1 P1 P1 P1	BMS BMS BMS BMS BMS
545 552 569 580 584	8.5 9.0 ნ.6	164 172 171	187 190 192 195 203	330 341 349 356 368	364 376 383 384 393	176 181 189 182 165		143 142 147 148 150	30 79 36 35 87	59 58 63 65	58 48 57 59 62	22 23 24 23 25	19/37 19/36 21/41 21/40 16/38		5/49 5/49 5/49 5/49 5/49	Pl Pl Pl	BMS BMS BMS BMS BMS
589 597 600 600 603	10.6 9.4	181 175 177 176 181	201 202 202 200 200	360 365 370 368 374	393 400 398 399 403	193		158 159 144 150 154	86 99 01 89	65 73 35 74 69	61 66 63 66 65	27 24 25 25 25	18/37 19/35 19/37 19/37 18/38		5/49 5/49 5/49 5/49 5/49	Pl Pl Pl Pl Pl	BMS BMS EMS EMS BMS
609 618 621 627 629	12.5 11.8 12.8	189		382 390	423	202 201 200 209 203		156 162 162 166 173	92 98 92 301 96	69 71 67 76 73	63 70 67 72 70	26	18/37 17/36 11/39		5/49 5/49 5/49 5/49 5/49	Pl Pl Fl	BMS BMS BMS BMS BMS
639 645 664 673 695	13.8 14.5 16.7	192		397 597 409 421 438		209 217 225		168 175 166 183	101	80 73 80 83 76	73 67 75 84 78	27 25 25 27 21	19/37 19/38 18/34 18/37	f	5/49 5/49 5/49 5/49 4/49	Pl Pl Pl Pl Ll	BMS BMS BMS BMS BMS EMS
751 762	27 24	221 228			510 508	241 248	wczac wa da	200 203		77 91	74 82	29 30	19/37 18/35	f	5/49 5/49	Pl	BUS PLIS

Table 71. Skipjack from the Northwestern Pacific Omaezaki Shizuoka Prefecture, Japan*

name and and									-		parts may man med
Total Length	Weigh?	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Inst	Greatest Body Depth	Length Perforal	No. Gill Rakema	ve.	Month and Year	sear.
252 259 266 272 274	。56 。56 。62 。69	71 69 74 76 75	80 81 84 90 89	151 155 161 161	70 80 82 86 86	62 57 63 66 68	30 30 33 32 34	18 / 36		8/48 8/48 9/48 9/48 9/48	Pl Pl Pl Pl Pl
276 279 281 282 301	.67 .78 .82 .67	76 80 81 77 81	90 92 93 92 92	161 171 164 176	91 92 89 89 94	65 79 70 63 77	35 36 35 32 41	18/36 18/41 20/38 8/22		9/48 9/48 8/48 9/48 9/48	Pi Pi Pi Pi Pi
302 306 318 318 323	1.0 1.0 1.2 1.3 1.2	86 86 89 84 85	98 102 107 100 104	179 182 188 193	96 98 97 96 99	75 76 69 78	37 37 41 34 41	16/38 18/36 19/38 21/39 20/38		9/48 9/48 9/48 7/48 7/48	Pl Pl Pl Pl Pl
324 327 330 330 345	1.1 1.6 1.3 1.4 1.7	92 90 93 93 98	105 108 108 110 115	195 195 197 199	104 103 108 106 111	73 78 81 87 88	41 40 43 42 45	19/37 17/38 18/40 18/38 18/39	f f m	9/48 8/48 8/48 7/48 9/48	P1 P1 P1 P1 P1
354	1.6 1.7 1.8 2.0 2.0	99	114 114 120 118 124	216	110 108 113 113 118	82 84 91 95 96	44 45 46	19≠38 19≠37 18≠38 17≠39 19≠36	f	5/48 7/48 9/48 8/48 9/48	Pl Pl Pl Pl Pl
	2 · 1 2 · 2 2 · 0 2 · 2 2 · 1		118 125 120 126 124	•	118 118 118 122 123	90 94 87 99 90	49 46	18/36 18/36 18/37 18/37 21/31	m	6/48 9/48 5/48 9/48 7/48	Pl Pl Pl Pl Pl

^{*}Contributed by the Japanese Fishery Agency

Table 71. Skipjack from the Northwestern Pacific: Omaezaki Shizuoka Prefecture, Japan (continued)

Total Length	Weight	Head Length	Snout to Ins. let Doresl	Shout to Ins. End Dorsal	Smout to Tas. Veatral	Greatest విరేశ్ విశార్ఘ	Length Pestoral	No. Gill Rakera	SUK	Month and Year	Gear
382 388 388 391 392	2.3 1.8 2.3 2.4 2.6	109 98 110 111 107	116 126	232 240	121 111 125 125 122	97 93 95 101 95	49	20/40 17/35 19/38 16/36 20/37	m	9/48 7/48 9/48 7/48 5/48	Pl Pl Pl Pl
	2.9		133	239 246	130 130 130 131 123	94	58	21/39 20/37 17/39	m f	9/48 7/48 7/48 8/48 6/48	Pl Pl Pl Pl Pl
408 408	3.1 2.7	115 121 115 122 120	134 132 134	244 242 247 247 250	132 135 134 130 134	106 107 99 98 101	56 57 50 56 58	16/35 16/34 18/39	f f	7/48 7/48 3/48 6/48 7/48	Pl Pl Pl Pl Pl
408 413 413 418 418	2.9 3.7	118 120 119 118 123	134	258 257 251 254 261	132 134 131 136 138	108 110 116 104 105	54 56 58 56 62	18/38 18/37 17/36 19/39 18/35	f f m	7/48 7/48 7/48 7/48 5/48	Pl Pl Pl Pl Pl
419 419 421	3.3 2.9 3.2 2.8 3.2	122 120	141 143 144	260 252 257	135	113 118 106 105 105	56 55 56	17/36 16/34 16/34 18/39 18/36	f f f m	8/48 7/48 6/48 8/48 7/48	P1 P1 P1 P1 P1
426 426 427	2.2 3.3 3.4 3.6 3.3		141	264 265 262		115 107 108	61 59 60	20/35 17/39 17/40 18/37 18/37	f m m	6/48 ?/48 8/48 5/48 8/48	P1 P1 P1 P1 P1

Table 71 Skipjack from the Northwestern Pacific: Omaezaki, Shizuoka Prefecture, Japan (continued)

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsell	Snout to Ins.	Greatest Body Depth	Length Pectoral	No. Gill Rakers	Sex	Month and Year	Gear
431 432 433 437 438	3.6 3.8 3.7 3.7 3.8	122 125 127 128 123	140 148 145 147 145	260 266 266 217 270	136 140 146 144 137	115 114 116 114 113	59 60 61 52 61	18/34 20/36 18/39 20/38 18/36	f f m m m	6/48 8/48 8/48 8/48 6/48	Pl Pl Pl Pl Pl
439 439 439 440 442	3,7 3.8 3.8 3.3 4.0	128 127 129 133 128	145 148 151 153 150	274 273 269 268 272	148 143 145 150 146	113 124 105	62 61 64 66 62	17/36 17/40 17/36 17/37 19/35	m m f f	8/48 7/48 8/48 7/48 9/48	Pl Pl Pl Pl Pl
443 444 445 445 447	3.6 3.9 3.8 3.9 3.9		152 150 151 153 148	272 272 277 275	143 145 145 144 141	118 114	59 61 60 65 61	19/36	m m f	7/48 9/48 8/48 7/48 8/48	P1 P1 P1 P1 P1
448 449 449 450 450	4.0 3.9 4.1 3.8 3.8	131 133 124 120 130	152 153 151 152 152	277 279 279 272 272	148 147 143 145 146	110 114	63 64 66 65 59	16/40 19/35 17/37	m m f	5/48 7/48 6/48 6/48 5/48	Pl Pl Pl Pl Pl
454	2.1 3.6	130 134	152 148 152	276 274	146 147 146 150 151	111 109 116		17/35 18/35 19/36	f m f m	6/48 7/48 7/48 7/48 8/48	P1 P1 P1 P1 P1
458 459 460 461 462	4.3 4.2		153 158 151		149 147 150	123 112	66 66 74 61 66	18/35 21/37	m f	5/48 5/48 6/48 6/48 6 /48	P1 P1 P1 P1 P1

Table 71. Skipjack from the Northwestern Pacific: Omaezaki, Shizucka Prefecture, Japan (continued)

-											-
Total Length	Weight	Head Length	Snout to Ins.	Snout to Ins. 2nd Dorsal	Snout to Ins. Ventral	Groatest Body Depth	Length Pectoral	No. Gill Rakers	Sex	Month and Year	Gear
464 465 466 468 468	4.3 4.7 4.2 4.1 4.6	136 136 141 139 137	155 157 161 158 157	283 286 289 284	152 155			18/36 20/36 17/45 18/35 19/38	m f m m	7/48 5/48 8/48 7/48 7/48	Pl Pl Pl Pl Pl
469 470 471 472 472	4.9 4.0 4.6 4.8 4.8	135	170	284 286 291 301 286	158	118 119 124	63 67 66 65 70	18/37 20/35 19/39 17/40 19/37	m f f	8/48 7/48 5/48 6/48 7/48	Pl Pl Pl Pl Pl
473 473 474 475 475	4.7 4.9 4.6	135 138 138 141 139		283 296 288 289	156	130 120 125 125 121	67 67	19/38 17/35 16/36 19/36 20/36	m m f' m	8/48 5/48 8/48 7/48 7/48	Pl Pl Pl Pl Pl
476 477 477 478 479	4.0 4.8 4.8 4.4 4.4	141 142 142 143 149	163	292 294 296 294 297	159 158	116 120 122 118 117	71	19/37 19/34 18/35	m m m f m	8/48 7/48 7/48 7/48 6/48	Pl Pl Pl Pl Pl
480 481 483 483 483	4.7 4.9 4.9	140 141 145 142	165	301 292 297 298 304	162	123	67 66 72 71 72	18/39 19/38 18/37 19/38 18/38	f m m f m	8/48 6/48 6/48 9/48 7/48	Pl Pl Pl Pl Pl
484 484 485 487 487	5.4 5.0	142 144 144 146 145	173 174 171	302 307 301 299	152 158 160 162 164	135 119	71	17/38 19/37 15/35 17/37 18/3?	m m f m	8/48 9/48 6/48 7/48 7/48	Pl Pl Pl Pl Pl

Table 71. Skipjack from the Northwestern Pacific: Omaezaki, Shizucka Prefecture, Japan (continued)

Total Length	Weight	Head Length	to	Snout to Ins. 2nd Dorsal	Snout to Ins.	Greatest Body Depth	Length Pesteral	No. Gill Rakers	Sex	Wonth and Year	Gear
487 488 488 488 489	5.6 4.9 5.3 5.3		168 164 169 164 170	303 298 299 296 306	159 162 160 164 161	137	70 73 71 72	19/34	f m m	7/48 6/48 9/48 6/48 7/48	P1 P1 P1 P1 P1
489 489 490 491 492	5.4 5.4 5.1 4.5	148 143 149	163 169 166 170 169	304 306 308 309 300	157 154 161 166 160	124 125 127	68 74 71 74 72	19/37 19/40	f m f f	6/48 7/48 8/48 7/48 6/48	Pl Pl Pl Pl Pl
492 493 494 494 495	5.8 4.9 5.1 5.8 5.1	142 148	170 166 166 170 171	309 300 304 305 311		126 119 138	68 73 74 74 74	19/38 19/37	f m m m	8/48 7/48 7/48 7/48 7/48	Pi Pl Pl Pl Pl
497 497 498 498 498	5.3 5.4 5.0 5.8 5.8	150 150 148	170 171 158 175 160	309 305 305 307 300	160 165 166 160	130 122 134	65 72 74 75 71	18/39 19/38 20/38 18/37 20/36	f m m m	7/48 7/48 7/48 8/48 8/48	P1 P1 P1 P1 P1
499 499 500 501 501	5.4 5.6 5.7 5.4 5.8	143 146 149	175	I.	163 160 166	122 128 118		20/38		8/48 5/48 5/48 6/48 7/48	Pl Pl Pl Pl Pl
501 505 506 506 506	1	150 147 149	172 167 170 171 173	309 311 312 331	164 169 166 167 166	128 131 130	72 74 75 73 72		f m f m m	9/48 8/48 7/48 7/48 8/48	Pl Pl Pl Pl Pl

Table 71. Skipjack from the Northwestern Pacific: Omaezaki, Shizuoka Prefecture, Japan (continued)

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Ventral	Greatest Body Depth	Length Pectoral	No. Gill Rakers	Sex	Month and Year	Gear
506 507 508 508 508	5.9 6.2 4.7 5.3 5.6	146	170 177 175 170 172	313 316 308 311 309	167 166 168 161 167	134 140 129 126 128	77 74 76 72 78		m m m	8/48 9/48 8/48 7/48 9/48	Pl Pl Pl Pl Pl
509 509 509 511 511	5.4 5.8 6.7 5.6 5.8	150 151 146	168 170 168 169 171	313 317 315 311 314	171 171 167 165 173		76 76 78 74 74	18/36 19/42 19/36 20/39 17/35	f m m m	8/48 7/48 8/48 7/48 8/48	Pl Pl Pl Pl Pl
513 514 514 515 515	6.0 5.9 6.2 6.0 6.4	154 150 154 154 156	178 176 175 177 181	327 319 313 313 321	171 167 169 172 174	134 135 131 135	78 82 78 81	20/38 19/35 19/37 17/36 17/34	m f f m	8/48 8/48 9/48 8/48 8/48	Pl Pl Pl Pl Pl
517 518 518 521 522	6.2 6.1 6.2 6.4 6.4	153 152 155 157 150	184 173 175 184 174	321 312 319 321 321	173 171 174 174 166	135 133 134 133 131	74 78 77 79 74	17/35 18/34 18/34 19/39	f m m f	8/48 8/48 7/48 8/48 6/48	Pl Pl Pl Pl
522 523 523 523 525	6.7 6.2 6.4 6.4		185 179 175 176 180	324			75 78	17/36 18/36 20/39 20/35 20/39	f m f f	8/48 6/48 8/48 8/48 6/48	Pl Pl Pl Pl Pl
526 528 531 532 532	6.6 6.7 7.1 6.7 7.1	160 163		328	175 177 176 174 176	138 138 131	74 77 84 81 78	18/38 18/37 18/38 18/36	f m m m	8/48 7/48 8/48 9/48 6/48	P1 P1 P1 P1 P1

Table 71. Skipjack from the Northwestern Pacific: Omaczaki, Shizuoka Prefecture, Japan (continued)

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsel	Snout to Ins.	Greatest Body Depth	Lengin Pectoral	No. Gill Rakers	Sex	Month and Year	પ્રેલ્ઝ જ
532 533 533 535 536	7.4 6.8 7.1 6.7 6.9	163 159 157 157 160	185 182 184 180 182	337 325 331 328 333	180 177 179 177 175	149 142 139 140 142	78 84 79 80 79	20/41 17/35 18/37 18/37 20/38	m f m f	8/48 9/48 9/48 8/48 9/48	Pl Pl Pl Pl
536 537 537 538 538	8.0 6.7 7.3 6.9 7.2	162 160	182 181 190 179 181	360 326 343 331 332	179 178 176 175 176	149 137	82 84 83 78 87	21/41 20/39 20/38 17/41 20/39	m f m f	6/48 8/48 9/48 7/48 9/48	Pl Pl Pl Pl Pl
538 539 541 541 541	7,2 6,4 7,1 7,2 7,3	159 156 159 169 159	188 177 179 181 179	338 337 330 337 334	176 176 175 180 174	142	82 78 79 82 84	19/40 18/37 18/37 18/40 18/35	m m f	9/48 8/48 8/48 9/48 8/48	Pl Pl Pl Pl Pl
542 542 543 545 546	6.9 7.0 6.9 7.5 7.3	163 160 160	180 186 184 183 190	330 333 335 341 334	182 182 181 369 179	138 144 138 143 145	83 88 84 85 84	18/38	f m f m f	6/48 9/48 9/48 9/48 8/48	Pl Pl Pl Pl Pl
549 550 551 616	7.5 8.2 12.2	161 165 165 187	189 190 190 219	341 342 340 389	178 186 185 207	147	84 86 84 102		f m m f	6/48 9/48 9/48 9/48	Pl Pl Pl Pl

Table 72. Skipjack from the Northwestern Pacific: Tanabe, Wakayama Prefecture, Japan*

	1	Τ	1			1		1	4				
Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins.	Snout to Ins.	Greatest Body Depth	Length Pectoral	Height Anal	No. Gill Rakers	Sex	Month and Year	Gear
375 390 400 405 415		106 87 111 116 120	129 131 133 144 138	228 240 242 250 250	273 275	123 127 129 134 136	96	51 54 48 53 56	22 53 24 30	19/36 17/37 19/38 19/37	m f f m	5/48 5/48 5/48 7/48 7/48	Pl Pl Pl Pl Pl
420 425 440 445 452	2.9 3.2 3.3 3.8 4.2	120 123 124 128 136	147	256 263 265 259 278	280 287 290 291 302	139 139 141 146 150	103 107 116 114 117	55 54 57 55 62	28 27 30 33	18/37 17/37 18/39 18/34 17/38	m f f f	7/48 7/48 5/48 7/48 5/48	Pl Pl Pl Pl Pl
460 465 470 475 490	4.4 3.6 4.4 4.7 5.0	133 133 139 143 146	158 155 165 162 167	285 283 293 291 310	317 308 317 335	150 148 156 159 165	117 120 122 131	62 64 55 68 69	33 35 36	16/36 17/36 18/36 16/38 18/37	m f f	5/48 5/48 7/48 5/48 7/48	Pl Pl Pl Pl Pl
490 490 495 510 515	5.0 5.1 4.4 5.8 5.3	147 146 141 149 158	172 165 165 172 179	305 305 305 325 320	330 324 315 340	164 156 160 1.68 166	121 127 114 125 135	69 70 65 70 72	39 42	19/36 19/38 17/38 20/39 19/39	f f f m	7/48 7/48 7/48 5/48 7/48	Pl Pl Pl Pl Pl
525 535	7.1 6.4	155 160	183 181	340 344	360 360	168 176	136 130	78 74	42 47	17/39 18/37	m m	5/48 7/48	Pl Pl

^{*}Contributed by the Japanese Fishery Agency

Table 73. Skipjack from the Northwestern Pacific: Northern Ryukyu Chains, Japan*

						AND DESCRIPTION OF	OCCUPATION AND DESCRIPTION AND	-		Year LEG. or	-77	
Total Length	Weight	Mead Length	Snout to Ins. lst Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins.	Shout to Ins. Ventral	Greatest Body Depth	Length Pestorai	No. of Gill Rakers	3 윤호	Month and Year	Gear
391 405 410 412 412	2.5	109 113 113 118 118	135 133	231 249 239 251 242	251 266 269 281 267	118 125 127 135 131	93 99 101 98 110	54 52 58 60 56	17≠3 4 18≠37	î n î î	8/48 7/48 8/48 7/48 8/48	Pl Pl Pl Pl Pl
414 415 420 423 424	2.6 2.7 2.8 2.7 3.2	117 116 117 118 117	136 135	249 254 255 251 277	278 273 279 282 286	131 127 129 132 129	97 103 101 103 100	55 56 57 55 62	18/33 17/33 19/37 17/38 17/37	m f m f	7/48 7/48 7/48 7/48 8/48	P1 P1 P1 P1 P1
425 428 428 431 434	2.8 2.8 3.3 3.6 2.9	139	139 136 146	252 266 257 259 263	273 280 288 285 288	131 130 134 134 137	102 100 101 107 103	60 58 59 62 59	18/38 17/32 17/36 18/35 16/34	m f m	8/48 7/43 8/48 8/48 7/48	Pl
434 438 439 441 442		112	142 134 138	256	290 287 269 278 294	135 123	106 102 98 107 105	61 66 56 58 61	19/37	f f f	8/48 8/48 8/48 8/48 8/48	P1 P1 P1 P1 P1
443 443 443	3.6	124 127 124	141 149 145	257 279 262		141 141 136	101 109	65 64 65	18/34 17/37 20/35 19/36 17/37	f	7/48 8/48 8/48 8/48 8/48	Pl Pl Pl Pl Pl
449 455 459 459 464	3.9 3.8 4.0	130 138	150 150 154	272 276 281	284 305	139 143 142 142 145	129 112 113	67 63 64	18/36 17/34 19/36 20/37 19/36		8/48 8/48 8/48 8/48 7/48	Pl Pl Pl Pl Pl

^{*}Contributed by the Japanese Fishery Agency

Table 73. Skipjack from the Northwestern Pacific: Northern Ryukyu Chains, Japan (continued)

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins.	Snout to Ins. Ventral	Greatest Body Depth	Length Pectoral	No. of Gill Rakers	Sex	Month and Year	Севг
466 469 473 478 480	2.9 2.9 3.6 4.3 4.6	133 136 132 136 135	154 143 150 167 163	285 298 280 280 303	312 322 312 324 312	148 149 145 158 154	113 115 111 133 118	68 67 64 71 71	17/36 18/37 18/37 18/37 17/38	f f f f	7/48 7/48 6/48 8/48 5/48	Pl Pl Pl Pl Pl
483 492 493 496 505	4.1 4.8 4.1 4.6 5.1	136 141 138 144 145	155 160 156 166 162	295 301 296 300 305	313 336 331 339 333	150 156 148 158 158	115 126 118 119 125	68 69 69 74 71	18/36 16/36 18/35 19/37 17/38	f f m m	7/48 6/48 6/48 7/48	Pl Pl Pl Pl Pl
516 542 608 625 640	5.2 6.4 7.9 103 108	146 154 170 178 179	172 182 200 211 218	320 336 365 392 392	338 368 407 417 426	158 175 189 193 190	125 132 138 162 157	76 78 89 90 98	19/37 18/35 20/36 19/37 19/35	f f m m	5/48 5/48 5/48 5/48 6/48	Pl Pl Pl Pl Pl
646 650 660 664 665	10.5 11.1 11.6 11.2 12.8	182 180 186 187 187	215 208 217 222 225	394 395 394 410 417	427 431 438 444 447	199 194 205 210	160 157 169 162 168	91 91 99 95 94	19/40 18/34 18/36 18/39 20/34	f m f f	6/48 6/48 6/48 6/48 6/48	Pl Pl Pl Pl Pl
676 681 692	13.0 13.3 12.9	184 192 191	222 225 225	416 415 417	459 461 451	212 218 212	168 170 169	105 107 105	22/37 18/37 19/38	m f m	6/48 6/48 6/48	Pl Pl Pl

Table 74. Skipjack from the Northwestern Pacific Southwestern Panay Islands, Philippines

			, ,									
Total Length	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins. Ventral		Total Length	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins. Ventral
460	140	167	295	310	157		536	156	178	310	340	177
471	148	179	308	326	163		540	168	190	340	377	185
473	155	178	315	338	169		541	171	194	351	392	182
479	148	174	305	335	172		543	163	200	350	386	187
480	151	177	312	337	169		544	165	200	348	391	188
481	148	172	300	340	162		550	173	192	342	378	188
487	148	166	316	343	170		552	165	184	342	374	181
487	158	178	305	346	173		553	168	196	350	386	201
487	159	174	318	342	174		554	162	188	320	344	178
494	147	177	314	344	172		554	175	202	364	390	187
497	157	177	318	350	180		555	168	191	348	384	180
500	150	180	312	343	167		557	178	207	363	388	194
500	152	174	315	348	166		558	171	200	354	388	193
500	158	182	323	346	172		559	168	199	350	391	186
501	157	190	334	354	176		560	177	201	364	394	193
502	152	176	323	348	168		563	172	204	365	404	194
503	158	190	320	346	172		563	177	215	369	386	201
504	152	176	305	357	166		564	178	214	376	392	200
509	157	194	335	351	170		564	180	207	364	409	207
514	160	192	340	360	178		567	174	204	362	400	192
516	163	178	326	365	176		568	176	211	371	406	201
516	169	197	336	365	186		570	171	199	366	389	190
518	153	186	311	328	172		572	184	205	373	401	201
519	158	180	330	363	176		573	174	201	359	391	189
522	187	190	337	365	185		579	180	215	380	405	195
523	166	192	337	362	181		584	184	213	374	413	208
524	164	182	337	366	177		584	187	213	378	415	200
524	170	193	341	365	191		586	185	220	377	410	207
526	162	188	343	368	180		586	186	213	377	416	202
527	161	189	340	370	176		586	186	215	377	412	207
528 530 532 533 534 k Fro	170 164 154 167 163	195 188 174 193 183 Phili	337 344 299 346 346 ppine 1	357 366 336 355 380 3ureau	187 185 176 182 190	eries	587 587 588 592	183 184 183 188	206 205 213 218	377 374 380 384	407 408 407 412	197 198 204 204

Table 74. Skipjack from the Northwestern Pacific Southwestern Panay Island, Philippines (continued)

Total Length	Head Length	Snout to Ins. 1st Dorsal	0 0 5	Snout to Ins. Anal	Snout to Ins. Ventral	Total	ead eng	Snowt to Ins. 1st Dorsal	0 7 5	Snort to Ins. And	Snout to Inse Vantral
602 603 617 619 620	189 184 194 201 199	220 209 218 231 216	378 390 396 406 400	420 421 432 441 440	212 204 220 212 216	621 625 649 650	193 192 204 205	216 226 221 235	400 405 415 424	435 434 445 430	220 210 227 22

Table 75. Skipjack from the Northwestern Pacific Batangas Province, Luzon, Philippines*

451 454 455 456 458	138 143 143 146 140	155 161 157 157 161	284 291 290 286 294	318 320 322 318 320	159 158 160 162 156	497 498 501 505 506	163 157 161 161 164	177 171 173 176 182	321 319 317 330	358 352 352 348 348	195 1+5 183 163 150
459 461 466 468 470	143 146 143 149 143	158 163 161 174 168	290 296 293 307 301	318 320 324 324 326	161 157 162 161 160	513 515 519 520 520	157 166 161 156 164	183 185 184 173 184	53 53 53 53 53 53 53 53 53 53 53 53 53 5	646 359 554 500 370	100 320 163 189 189
472 473 473 477 480	145 145 150 146 153	164 165 161 162 168	300 303 297 295 314	326 324 336 328 333	164 160 182 180 168	520 521 525 529 532	165 169 162 170 167	182 184 186 184 178	328 327 336 340 335	360 100 380 372 372	199 20 20 199
481 483 484 484 484	160 150 150 153 157	162 170 165 177 168	308 311 303 312 311	341 327 352 338 333	169 170 184 173 172	535 541 542 543 548	165 181 178 166 171	202 191 183 18	54.1 56% 351 542 341	\$18 395 396 380 380	84 200 200 200 200
488 491 492 494 497	157 154 151 154 158	173 172 174 176 178	316 312 320 31) 321	350 342 344 344 354	174 167 165 171 174	567 590 601	177 187 188	200 208 2 ₁₄	560 375 388	55 T	196 205 2.0

^{*}From the Philippine Bureau of Fisheries

Table 76. Skipjack from the Northwestern Pacifics Southeastern Luzon, Philippines*

Total Length	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins.	Total	٠ + ١٠	Snout to Ins. 1st Dorsal	0 03 54	Snout to Ins. Anal	Sacut to Ins. Ventral
468 472 479 480 482	143 146 147 149 147	167 167 165 165 164	291 300 298 302 299	317 328 329 332 328	153 156 167 164 164	501 504 504 529	157 149 160 142	175 171 :73 162	320 318 319 315	340 336 342 345	173 171 171 160

Table 77. Skipjack from the South Central Pacific: Society Islands and Marquesas Islands (Frozen specimens measured in Honolulu)

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins.	Ins. Ventral to Ant. Edge Vent	st Bo	Length Pestoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	Gear	Examiner
503 519 586 599 602	5.5 6.5 10.5 12.5	160 181	188 204 218	327 373					75 85 96 97 103	50 54 61 60	48 54 65 64	23 24	21/38 20/40	m m m f	8/49 8/49 8/49 8/49	Pl Pl Pl	FCJ FCJ HBE FCC FCJ
625 625 626 630 633	13 12 12,8		218 220 218	395 400 403					98 100 105 107	74 72 74 76	71 71 69 70 69	23 24 25 25 25	18/38 19/39 20/39	f	8/49 8/49 8/49 8/49	Pl Pl Pl	HBE FCJ FCJ FCJ
633 641 643 645 647		196	220 222	402 406 406					108 107 106 112	74 71 78 70 74	70 73 75 68 74	25 25 26 25 20	19/40 20/37 19/39 20/38	m	8/49 8/49 8/49 8/49 8/49	Pl Pl Pl	HBE FCJ HBE FCJ HBE

^{*}From the Philippine Bureas of Fisheries

Table 77. Skipjack from the South Central Pacific: Society Islands and Marquesas Islands (continued)
(Frozen specimens measured in Honolulu)

Total Length	Weight	Head Length	Snout to Ins.	1 1 2	1+2-	Snout to Ins.	Ins. Ventral to	est Bo	Length Pectoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	Gear	Examiner
649 650 650 653 655	13.5 14.5 14	199 197 203 204 206	230 220 227 229 228	403 416 406					109 107 111 116 100	80 79 76 83 78	77	27 25 22 24 24	20/39 19/36 20/37 20/38 19/39	m m f f	8/49 8/49 8/49 5/49 8/49	P1.	HBE HBE FCJ HBE FCJ
672 683	14.3 15.5	208 211	239 238	426 430					115	79 74	75 66		19/41	f f	8/49 8/49	Pl Pl	FCJ FCJ

Table 78. Skipjack from the South Central Pacific:

Marquesas Islands

(Frozen specimens measured in Honolulu)

				(11)	32011	Spoc	, milon	.0 1120	4041	-		/	~~/				
462 468 469 472 483	5 5.5	143 141 142		293 295 293	319				74 74 71 68 82	39 46 38 42 46	36 42 40 42 42	20 21 23	20/38 20/40 19/39 19/39 21/38	f m f f	4/49 4/49 4/49 4/49 4/49	P1 P1 P1 P1	FCC FCC MBS FCC
494 496 502 502 505	6 5.5 6	151 156 148	171 170 177 173 176	312	341 337				76 74 78 76 74	43 44 48 48 46	44 41 44 47 42	21	20/39 20/40 19/39 16/39 19/40	f f m f	4/49 4/49 4/49 4/49 4/49	Pl Pl	KY FCC FCJ MBS FCC
507 518 527	7		181 173 179						78 83 78	44 49 45	47 42 45	23 24	18/36 18/37 18/39	f f m	4/49 4/49 4/49	Pl Pl Pl	KY TFG TFG

Table 79 Skipjack from the South Central Pacific:
Society Islands
(Frozen specimens measured in Honolulu)

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins.	Snout to Ins. Ventral	Ins. Ventral to	st Bo	Length Pectoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	Gest	Examiner
465 470 470 481 482	6.5 7 4.5 5.5	142 145 145	160 161 167 163 167	284 291 295 303 300	314 314 318 321				70 74 73 75 76	42 39 42 40 43	41 41 43 40 42	21 21 22 21 22	18/38 18/37 19/39	m	4/49 4/49 4/49 4/49	Pl	MBS TFG KY TFG FCJ
494 497 501 502 504	6 8 5 6 5 6 7	149 154 157 154 158	173 176 177	309 317 305 317 318	333 343				77 81 81 77 81	44 50 52 43 52	42 45 48 43 51	25	21 × 40 20 × 38	f f	4/49 4/49 4/49 4/49 4/49	Pl Pl Pl	FCC TFG FCC MBS
507 516 521 529 529	6 7 7.5 7.5	1.51 1.55 1.57 1.61 1.69	172 185	317 315 319 333 331	348 342 351 359				76 81 85 85 86	55 45 57 50	41 54 46 51 50	24 25	16/38 20/36 19/39	f	4/49 4/49 4/49 4/49 4/49	P1 P1 P1	KY KY TFG KY FCJ
531 531 532 534 535	5.5	160 168 164 166 167	192 189 188	339	360 362 366				86 84 83 91 82	53 52 49 58 50	50 49 44 54 50	26 23 25	20/37 20/36	fff	4/49 4/49 4/49 4/49 4/49	Pl Pl Pl	MBS FCC FCC TFG KY
542	9.5 8 8.5	168 165 170	190	344 345 336					87 87 84 85 88	50	47 54	25 23 25	18/38 19/38 21/39 23/42 19/38	f m m	4/49 4/49 4/49 4/49 4/49	P1 P1 P1	FCC KY
548 548 550 551 554	8.5 8.5 10.5	169 164 171	192	347 344 350	377 375 376		ECOLUL A SELECTION		83 88 86 92 83	54 59 54	53 52	21 23	19/37 19/38 19/40 19/40	m m m	4/49 4/49 4/49 4/49 4/49	Pl Pi Pl	FGJ

Table 79. Skipjack from the South Central Pacific:
Society Islands (continued)
(Frozen specimens measured in Honolulu)

	Γ							-										
Total Length	Weight	Head Length	Snout to Ins.	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins.	Ventral	Ins. Ventral to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	Gear	Examiner
561 564 566 567 569		172 175 174 181 177	196 199 198 206 197	357 354 355 359 358	386	İ				91 88 93 97 81	54 61 62 58 65	53 57 51 57 62	23 26 26 27 25	20/35 19/37 20/41 19/40 26/38	m m f m	4/49 4/49 4/49 4/49 4/49	Pl Pl Pl Pl	FCC FCJ FCJ FCJ MBS
609 733 755 756 759	21,5 25 27,5	188 228 226 238 233	209 262 260 266 249	466 473	505 516 518					121 127 131 132	66 86 87 94 79	80 96	25 29 28 29 30	18/37 19/38 20/41 18/38 20/41	m f m m	4/49 4/49 4/49 4/49 4/49	Pl Pl	FCJ FCJ FCJ MBS TFG
759 763 766 768 769	24 23.5 25	236 229 240 235 232	261 263 264 269 264	481 488 491	519					132 124 123 128 140	90	85 89	30 30 30 31 32	19/37	m f f m f	4/49 4/49 4/49 4/49 4/49	Pl Pl Pl	FCJ MBS TFG FCJ TFG
773 774 777 782 783	25.5 25.5 25	239 239 238 245 239	264 268 262 281 270	486 491 490 500 494	533 531					125 128 128 136 127	92 94	87 85 92	29 31 29 31 27	18/41 19/38 18/37 20/39 19/38	f f m f	4/49 4/49 4/49 4/49 4/49	P1 P1	TFG FCC TFG MBS KY
788		239 240	282 260 266 272 273	494 498	543 537					135 130 128 129	94 90	85 91 94	30	19/39 21/37 19/38 19/38 20/39	f f f f	4/49 4/49 4/49 4/49 4/49	Pl Pl Pl	MBS
790 791 792	24,5 28,5 26 25 26	244 252 242		503 500 498	540 543 536					127 134 135 134	95 98 104	91 90 96	31 31 31	19/37	f m m m	4/49 4/49 4/49 4/49 4/49	Pl Pl Pl	TFG TFG

Table 79. Skipjack from the South Central Pacifics Society Islands (continued) (Frozen specimens measured in Honolulu)

Total Length	Weight	Head Length	Snout to Ins. lst Dorsal	Smout to Ins. 2nd Dorsal		Snout to Ins. Ventral	Ins. Ventral to	Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	Gear	Examiner
796 797 797 798 798	26,5 28 28 26 29	249 247 248 243 252	267	501 504 504 488 506	543 542					123 139 138 132 145	83 92 96 93 88	85 95 85 98	33 30 30 30 29	19/38 18/39	m	4/49 4/49 4/49 4/49 4/49	Pl Pl Pl Pl Pl	TFG MBS FCJ TFG KY
799 800 801 802 804		252	274 269 277	498 506	550 551 551					130 131 130 131 125	95 98 90 90 81	95 93 87 86 83	28 29 28 27 29	17/39 19/38	m m	4/49 4/49 4/49 4/49 4/49	Pl	MBS TFG FCC KY FCC
804 807 808 810 810	27.5 27.5 29 26.5 28.5	245 244 248 252 247	274 276 283 290 272	507 510 510	540 549 555 547 549					133 129 130 140 134	92 97 101 105 102	92 92 95 95	31 30 32 30 31	19≠39 22≠41	m	4/49 4/49 4/49 4/49 4/49	Pl Pi	TFG MBS MBS KY MBS
810 811 811 815 816	30 27.5 31.5 31 31.5	242 249 256 253 247	272 270 284 284 283	519 517	547 559					134 133 137 135 131	100 82 100 97 96	88 88 92 94 94	29 30 32 31 29	19/37 19/42	m m	4/49 4/49 4/49 4/49 4/49	Pl Pl Pl Pl Pl	FCJ TFG FCJ FCC KY
821 821 826 849 858	34.5 34	258	281 299 308	529 542	564							100 98	33 29	20/42 20/39 19/40	f	4/49 4/49 4/49 4/49 4/49	Pl Pl	MBS
880	35	269	299	550	596					145	103	102	32	20/41	m	4/49	Pl	MBS

Table 80. Little Tunny from the Central Equatorial Pacific: Phoenix Islands

Total Length	Weight	50	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	t O	l ¤ œ	Ins. Ventral to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	Gear	Examiner
565	7.5	149	170	317	363	175	204	132	98	50	50	23			8/50	Pl	KY

Table 81. Little Tunny from the Western Equatorial Pacific: Western Marshalls

424 430 438 440 441	3 3.5 3.5	121 122	128 136 142	250 247 264 273 266	277 292 293	135 139 140	108 106 111 115 111	77 74 78 79 78	33 32 34 35 37	36 34 36 34 34	19 18 21 20 21	f f f f	*/47 */47 */47 */47 */47	Tr Tr Tr Tr	JCM JCM JCM JCM
448 451 453 454 457	3.5 4 4	125 125 127	130 143 137 137 140	270 276		142 151	109 119 116 117 110	77 79 78 80 81	36 33 37 37 33	38 34 38 37 37	19 21 21 21 20	m f f f m	*/47 */47 */47 */47 */47	Tr Tr Tr Tr	JCM JCM JCM JCM
460 467 470 473 477	4 4	128 125 126 130 133	142 137 144	273 279 271 285 287	307 312 300 313 319	153 145 151	117 115 117 111 123	85 79 82 83 86	36 33 37 38	38 33 40 36 39	21 21 22 22 22 22	f f m f m	*/47 */47 */47 */47	Tr Tr Tr Tr	JCM JCM JCM JCM
479 481 482 485 487	4 4.5 4.5 4 4.5	129 130 130	144 142 143 145 148	283 285	311 316 315 318 320	152 164	116 124 126 116 120	87 82 83 87 86	35 41 36 39 41	40 39 38 38 42	21 20 21 20 22	m m m	*/47 */47 */47 */47 */47	Tr Tr Tr Tr	JCM JCM JCM JCM
494 496 497 498 502	4.5 4.5 4.5	134 134	150 148	297 296 296	329 327 326 330 327	155 154 161	124 122 119 121 120	88 83 87 85 87	37 39 42 37 36	39 38 39 41 37	22 23 20 23 21	f m m m	*/47 */47 */47 */47 */47	Tr Tr Tr Tr	JCM JCM JCM JCM

^{*}From July 19 to August 26.

Table 81 Little Tunny from the Western Equatorial Pacific: Western Marshalls (continued)

Total Length	Weight	Head Length	Snout to Ins. lst Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins.	Snout to Ins. Ventral	Ins. Veninst to. Ant. Edge Veni	Greatest Body Depth	Length Pectoral	Reight 2nd Dersal	Height Angl	Dismeter Inst	No. Gill Rakers	Sex	Month and Year	ii. cs (-¥)	Examines
503 510 525 555 595	4.5 5.25 6 7	135 140		296 301 305 321 348	326 331 344 359 382	157 157 164 177 186		124 122 125 136 142	87 88 87 101 108	42 41 42 49 50	42 42 44 47 51	22 22 22 24 24 24		m m m m	*/47 */47 */47 */47 */47	Tr Tr Tr Tr	JCM JCM JCM JCM JCM

Table 82. Little Tunny from the Western Equatorial Pacific: Western Carolines

485 503	4 5	133 135	141 146	285 294	317 321	145 153 152 162		120 124	88 88	35 39	38 43	19 19	9/23 9/22	f° m	5/48 5/48 5/48 5/48	Tr 0	RS RS
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Table 83. Little Tunny from the Northeastern Pacific

				t .		í	1	- 1			1			4	. 1	1
393	2	109	124	251	274	125	1	96	55	20	21	17	11/35	m	4/47	а
545	6	158	162	313	361	174	1	.37	86	40	41	24	10/25		5/49	GW M b

Table 84. Little Tunny from the North Central Pacific: Hawaiian Islands

335	6	78 80 93 95	87 90 105 106 108	167 175 202 204 207	223 225	112	74 76 82 84 95	43 45 54 54 58	14 17 24 20 23	15 17 23 23 24	13 12 16 16 17	9/23 9/23 8/25 9/22		8/48 1/48 4/49 3/49	Tr Tr Tr	HHE HHE MBS KY FCJ
341 342 2 345 1 365 2 374 3	5	95 101 100 105 105	110 112 115	207 220	231 229		86 94	51 60 57 59 61	21 22 23 26 25	21 22 24 26 23	15 17 17 17	9/22 9/21 9/23 9/23	m f m	1/48 8/48 1/48 1/48 8/48	Tr Tr Tr Tr	MBS HHE MBS MBS HHE

^{*}From July 19 to August 26.

a, Off Costa Rica

b. Off Guatemala

Table 84 Little Tunny from the North Central Pacific: Hawaiian Islands (continued)

Total Length	Weight	Head Length	Snout to Ins.	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins. Ventral	Ins. Ventral to Ant. Edge Vent	(D) C3	Length Pestoral	Height 2nd Dorsal	Height Anal	Dlameter Iris	No. Gill Rakers	Sex	Month and Year	Gear	Exeminer
388 389 399 402 403	2.6 3 212	107 108 115 117 114	125 127	229 243 231	258 279 272	138 132		97 104 113 120 98	55 66 69 70	28 28 25 27 34	26 31 25 26 31	20 18 19 18 19	8/22 9/23 8/23 7/22 8/22	f f m	5/51 3/49 ?/48 5/51 1/50	Tr Tr Tr	NIC FCJ HHE WLEA JWR
403 406 408 408 410	3	110 114 115 118 118	128 128 130	239 249 250	273 272 275	130 127 131 133 131	144 150	105 106 107 110 116	67 68 68 168	28 37 27 26	28 33 29 27	20 18 19 20	9/24 10/23 8/21 9/25 8/22	f	8/48 9/49 5/51 5/51 ?/48	Pl Pl Tr Tr Pl	HHE HBE WAIM FCJ HHE
412 425 428 433 440	4 2.9 3.5 31 4.5	116 125 123 125 128	138 134 140	261 258 258	288 288 290		159	109 113 116 110 125	70 73 67 72 73	29 32 29 35 32	29 32 27 34 30	18 21 18 18 19	9/23 9/23 9/22 8/22	m m f f	?/48 3/49 8/48 7/50 8/48		HHE FCJ HHE KY HHE
442 449 451 453 453	3.9 4 4 4.5	127 130 130 129 128	144 148 148 145 146	269 278 272	305 309 299	148 149 149 144 153	150	124 117 117 120 117	76 74 76 71 77	33 33 30 34 33	36 32 30 32 35	19 20 20 19 21	8/22 8/24 9/22 8/24 8/22	f f f	3/49 1/48 ?/48 5/51 1/48	Tr Tr Tr Tr	FCJ MBS ORS WMM MBS
454 456 457 463 467	4.1	128 133	146 148 147 144 146	282 278 282	311 312 311	145		130 125 114 127 119	80 78 77 79 76	32 33 31 33 32	31 35 35 33 32	20 20 20 21 20	9/22 9/21 8/22 8/22 8/22	f	?/48 1/48 1/48 3/49 1/48	Tr Tr Tr	MBS
476 480 481 496 514	4	144 140 141	159 156 158 157 160	295 293 304	323 324 340	162 166		119 132 122 132 139	83 89 81 85 82	31 38 35 34 36	32 37 37 36 34	20 21 20 22 21	3/25 8/23 9/23	f	?/48 1/48 1/48 1/48 8/48	Tr	ORS MBS MBS MBS HHE

Table 84. Little Tunny from the North Central Pacific: Hawaiian Islands (continued)

Total Length	Weight	Head Length	Snout to Ins. lst Dorsal	Snout to Ins.		Shout to Ins.	Ins. Ventral to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	රිසෙ	Examiner
519 530 539 544 552		149 152 155 158 154	168 167 172	316 318 334	354 358	180 160		138 152 139 145 143	80 90 88 89 98	35 36 44 45 43	40 42 41 44 45	0 0 0 0 0 0 0 0 0 0 0 0 0	9 123 8 123 9 124 8 124 9 122	m f	?/48 ?/48 1/48 3/49 8/48	Tr Tr Tr	HHE HHE MBS FCJ HHE
554 579 586 588 606	74 9 9 9 9 9 9	156 170 163 163 174	187 181 181	349 35 3				160 146 152 152 156	91 107 104 100 103	44 52 52 46 45	42 53 51 49 47	22 23 24 24	9/23 9/23 8/22 8/21 9/23	m f m f	3/49 1/50 1/48 1/48 8/48	Tr Tr Tr Tr	FCJ JWR MBS MBS HHE
613 613 620 626 629		171 170 172 181 185	192 195 193	365 375 392	408 417 435	190 192	232 236	167 170 184	108 98 110	48 52 43 50 53	50 51 42 43 58	21 24 26 25 25	9/24 8/21 7/24 8/25 9/24	f f m m	5/51 6/49 5/51 5/31 1/50	Tr Pl Tr Tr	FCJ KY WMM WMM JWR
630 639 652 658 665	12.5 13.5	180 179 187	200 202 209	381 395 405	449	204 198 209 213 215	245 226 229	174 177 167 181 174	110 99 115 107 123	48 55 62 50 56	62	25 25 25 28 26	3,423 7,425 9,425 7,425 3,423	m m m m	5/51 5/51 1/50 5/51 1/50	Tr Tr Tr Tr	WMM WMM JWR WMM JWR
675 680	13.5 13.5 13.5 13.2 17	192 190 194	209	400 403 402	448 439 457	212 215	23? 232 244	174 170	107	59 €0	50 58 63 66 55	26 26 27	8/23	ſ	8/48 1/50 1/50 1/50 5/49	Tr	HHE JWR JWR JWR KY
687	14.6 14.5	197	222 220 212	421 417 409	466 462 469	220 218 219		198 191 191	114 118	50 57 54	52 56 60 65	26	8/23 8/24 9/23	n:	1/50 5/51 3/49 ?/48 1/50	Tr	JWR WAIM FCJ HHE JWR

Table 84. Little Tunny from the North Central Pacific Hawaiian Islands (continued)

					нам	ariai	1 15	rand	s (c c	nuir	iuea ,)					
Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Ansl	Snout to Ins. Ventral	Ins. Ventral to Ant. Edge Vent	1 (1) 3	Length Pectoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	XeX	Month and Year	Gear	Examiner
701 702 706 723 734	16.4 15	212 196 195 209 206	204 229	432 410 412 434 438	475 466 464 497 484	239 218 219 230 238	244	197 187 175 186 180	120 120 115 115 127	6 2 70 54 71 55	59 62 55 75 57	27 24 24 26 29	8/23 8/25 7/21 9/23	ſ	5/49 6/50 9/49 ? /48	Tr Pl Tr Tr Tr	FCJ KY KE HBE EHF
761	18	216	233	447	501	249		195	124	70	68	27	7/20		7/49	Tr	HBE
429	3	118	le 8	248	270	130		Marı	r3	34	32	20	n Paci 8/24	f		Tr	MBS
							J		pan								
379 400 420 433 452	2.6 2.9 3.1	103 113 113	114 127 130	224 244 250	259 276	117 118 127 130 134		99 102 111 121	58 61 70 74	31 35	31 33 33	17 18 17 19	8/21 9/23 8/23 10/23	f	5/49 5/49 5/49 5/49	P1 P1 P1 P1 P1	BMS BMS BMS BMS BMS
468 479 488 491	4.7 5.1 5.4	128 133 128	142	276 280 283 288 294	306 312 312 517	144 152		126 124 128 129	75.1 6.2 8.3	31 38 35 39	30 38 34 36	19 20 21 20 21	8/23 9/23 9/23 8/23 9/22	f	5/49 5/49 5/49 5/49 5/49	Pl Pl Pl Pl Pl	BMS BMS BMS BMS BMS

141

149

148

361 170

511 5.7 136 152 294 329 155

519 6.5 141 164 308 339 162

581 8.8 157 173 343 380 176

547 7.2 151 166 317

46

43

47

95

94

43

41

45

20

21

24

8/21

9/23

9/23

5/49 5/49

5/49

P1 PMS

Pl BMS

PI BMS

Table 87. Little tunny from the Northwestern Pacific Southwestern Panay Islands, Philippines*

					gerianicometrificanticanto			-			
Total Length	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins. Ventral	Total Length	Head Length	Snout to Ins. 1st Dorsel	Snout to Ins. Znd Dorsal	Smout to Ins. Anal	Snout to Ins. Ventral
200	55	60	128	135	68	296	83	95	186	200	94
200	56	68	127	140	65	298	80	88	184	200	90
231	65	78	138	152	68	298	80	98	186	198	94
232	66	74	136	157	70	298	83	100	185	200	90
234	65	68	144	156	70	300	60	92	196	198	90
238	66	76	146	165	73	300	80	92	188	195	88
246	68	76	146	168	75	300	80	96	182	202	90
246	70	76	155	170	78	300	34	100	188	200	95
248	70	75	152	168	76	300	85	95	186	200	95
266	78	85	164	182	82	300	85	98	188	208	95
270	78	82	166	180	84	303	75	96	184	195	95
278	75	88	168	188	88	304	85	100	185	205	100
278	78	88	172	195	88	305	84	100	190	200	95
278	78	94	172	188	86	310	82	95	188	210	98
280	78	88	168	195	90	310	83	88	186	205	95
282	75	86	172	190	86	310	85	96	185	205	90
282	78	85	170	190	85	310	86	100	168	205	98
282	78	88	172	190	88	312	83	96	192	210	98
284	75	85	168	190	85	315	35	100	188	208	95
284	78	85	173	192	93	315	86	94	188	210	95
286	80	87	172	198	88	315	88	105	195	210	100
288	80	98	180	192	95	456	120	140	278	306	142
292	80	95	182	196	90	465	126	142	274	300	145
292	80	95	186	198	90	465	128	145	282	305	145
294	78	93	184	205	88	466	125	142	282	298	140
294 295 295 296 296	85 75 80 81 82	93 86 92 100 96	178 175 174 186 186	195 195 198 204 198	88 88 90 92 95	478 500 525 528	122 132 150 146	140 148 168 166	275 500 325 324	328 330 368 367	148 146 170 168

^{*} From the Philippine Bureau of Fisheries

Table 88. Little tunny from the Northwestern Pacific Northeastern Panay Island, Philippines*

	1	·			_	-		and the Velezian was now a			
Total Length	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Instral Ventral	Total Length	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anel	Snout to Ins. Ventral
555	148	175	328	365	165	600	150	168	335	380	162
560	135	165	340	360	148	600	161	170	350	395	175
560	145	162	320	370	162	600	169	193	362	395	182
562	150	178	350	372	160	602	167	187	355	404	191
565	148	155	320	365	165	602	168	185	356	400	186
570	145	170	340	373	163	608	160	191	358	400	177
573	145	175	340	371	163	608	160	192	370	410	185
575	147	175	342	370	162	610	150	176	365	390	172
578	150	165	353	380	165	610	157	170	345	408	170
580	145	170	345	380	165	620	160	185	370	408	181
585	155	170	340	385	165	620	172	192	367	401	192
587	155	180	340	385	178	621	155	185	370	400	178
587	162	180	345	397	187	621	169	184	362	407	190
590	151	180	355	372	160	622	166	191	362	400	180
590	155	180	360	395	168	664	184	206	398	431	200

Table 89. Little tunny from the Northwestern Pacific Batangas Province, Luzon, Philippines*

225	63	69	135	155	69	259	70	82	157	180	78
228	61	68	136	148	67	260	69	80	158	170	78
230	62	70	138	157	72	260	70	81	158	176	78
236	67	71	142	162	75	260	70	82	166	171	78
236	67	76	153	163	82	261	71	75	156	176	82
242	66	75	144	168	75	261	72	82	158	171	80
245	66	80	147	170	75	263	72	82	158	177	81
245	68	76	148	165	75	263	72	83	159	178	79
246	66	77	146	162	72	263	73	83	157	181	83
247	6 8	76	153	163	77	264	71	79	158	178	81
253 255 257 258 259	67 72 69 68 70	77 80 71 79	152 150 154 148 152	173 173 173 172 175	7 8 79 7 9 85 81	264 265 265 265 265	72 70 71 73 75	82 82 80 81 85	160 157 158 160 163	180 182 175 180 178	82 82 78 82 86

^{*} From the Philippine Bureau of Fisheries

Table 89. Little tunny from the Northwestern Pacific: Batangas Province, Luzon, Philippines (Continued)

Total Length	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins. Ventral	Total Length	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins. Ventral
266 267 267 267 268	74 71 72 72 71	82 81 81 82 81	159 158 159 160 157	179 177 176 176 178	81 81 82 80 80	354 355 355 355 355	99 92 96 96 97	105 110 110 110 109	209 211 211 212 215	236 242 234 233 232	109 111 110 112 115
268 268 269 270 272	72 73 76 76 73	83 84 83 86 82	162 163 166 165 162	178 178 184 182 179	82 81 90 86 81	356 357 360 362	95 97 95 98 100	107 106 109 102 111	214 215 219 215 221	236 234 233 236 245	108 110 112 113 115
272 273 273 274 274	78 78 78 75 77	88 84 88 85 83	171 164 168 171 166	188 183 188 188 184	90 85 89 85 86	362 363 363 387 397	103 98 100 110 109	115 109 110 119 119	219 216 215 233 233	239 246 248 260 268	116 115 112 123 125
275 276 278 278 278	78 75 75 78 78	83 87 87 84 90	174 164 170 164 175	188 184 187 191 188	85 87 86 90 85	407 408 421 425 428	116 110 115 117 124	125 123 129 133 140	239 241 254 258 261	266 268 278 280 289	127 123 128 133 137
281 283 283 284 285	77 76 79 78 75	88 85 90 90 87	169 173 171 174 172	187 189 187 193 195	94 83 87 86 90	432 450 452 453 460	120 127 124 128 129	138 140 147 144 137	263 268 273 271 274	291 300 299 303 303	136 141 138 142 143
287 288 288 288 288	80 75 78 78 79	91 88 90 90 91	178 176 173 174 175	192 196 195 183 195	90 87 89 83 90	460 461 462 463 464	130 125 132 128 130	141 144 145 142 147	275 276 272 280 280	310 297 309 307 312	138 146 140 145
293 297 340 349 352	83 84 96 93	90 95 105 102 108	178 184 203 207 211	201 200 225 231 228	96 94 109 110	465 467 467 469 470	130 127 129 132 130	140 143 138 147 142	276 278 279 281 283	312 304 315 313 312	145 145 142 148 144

Table 89 Little tunny from the Northwestern Pacific Batangas Province, Luzon, Philippines (Continued)

				-	,		Constitute seasons are				
Total Length	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins. Ventral	Total Length	Head Length	Snout to Ins. 1st Porsel	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Smout to Ins. Ventral
470	131	146	284	311	144	491	139	151	300	321	153
470	132	148	290	319	150	493	133	148	291	318	148
472	128	145	277	317	150	493	135	150	295	331	155
474	133	150	288	308	145	494	137	148	293	323	147
475	133	147	288	308	145	496	134	153	298	333	153
475	140	150	279	319	148	496	140	157	307	339	154
476	132	148	291	320	148	497	135	147	290	321	150
477	133	148	287	316	145	497	137	158	296	327	153
477	134	149	291	318	148	497	140	150	300	341	155
477	136	156	296	319	145	500	131	149	291	324	148
478	132	149	288	320	151	501	139	157	301	330	154
478	137	148	288	321	154	503	136	154	297	327	155
478	139	148	288	323	156	503	137	158	298	321	153
479	130	148	291	324	151	503	140	159	300	328	153
479	134	148	287	311	145	503	141	157	302	330	154
482	135	152	295	316	144	504	133	148	290	322	148
484	135	146	288	322	150	504	138	156	301	327	156
485	137	151	295	323	158	504	139	152	295	330	152
485	138	152	288	324	155	505	139	155	305	337	156
486	134	153	295	320	152	506	145	154	310	341	155
487	134	142	284	320	148	507	134	149	296	323	153
487	136	154	289	327	153	507	144	158	305	340	160
487	137	150	291	333	158	508	137	150	300	338	153
487	137	152	297	318	151	508	142	161	300	337	157
487	142	152	295	328	156	512	138	157	310	336	154
488	135	150	292	327	161	512	146	161	312	338	160
489	131	146	284	323	147	513	143	154	311	341	158
489	135	151	291	326	151	513	146	164	318	345	159
489	136	146	290	320	150	514	141	161	301	340	157
489	139	155	297	322	147	514	145	160	311	344	165
489	142	156	299	326	153	515	141	151	302	340	1.57
490	133	146	293	326	149	515	147	160	311	353	1.67
490	140	152	291	329	152	516	141	155	307	339	1.61
490	140	152	299	339	152	517	141	151	308	340	1.57
491	137	152	284	315	142	518	141	156	305	350	1.56

Table 89. Little tunny from the Northwestern Pacific.
Batangas Province Luzon, Philippines (Continued)

						-	militings were state, with here	The Paris and the last last			
Total Length	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins. Ventral	Total Length	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorgal	Snout to Ins. Anal	Snout to Ins. Ventral
51 8 51 8 51 8 52 0 52 1	142 142 143 143 140	159 160 164 157 160	301 304 316 305 309	333 345 346 340 341	159 156 161 155 155	545 549 550 550	150 149 146 151 151	164 165 161 165 17]	320 320 325 322 321	363 360 359 362 354	164 168 164 169 171
521 521 521 522 522	140 143 144 144 147	167 162 163 159 164	314 306 311 307 310	343 332 344 347 340	157 148 159 160 163	551 553 553 553 555	155 152 153 153 148	177 169 171 173 170	336 328 330 335 330	375 365 370 371 389	169 167 167 168 170
524 524 526 526 528	141 147 146 149 150	161 158 164 163 162	310 312 316 317 318	350 348 347 351 357	163 162 161 164 166	555 559 559 560 562	149 153 154 155 160	169 170 164 172 172	334 330 326 329 340	356 371 363 370 372	172 181 168 170 175
534 534 535 536 536	144 147 147 146 151	164 163 166 165 163	316 315 321 319 312	•346 352 360 359 347	161 168 161 160 161	564 566 569 572 591	148 148 148 157 166	171 172 167 178 180	327 350 334 341 350	369 363 372 385 389	167 172 172 177 187
540 540 542	145 148 143	163 163 163	314 324 321	356 358 351	164, 165 164	602	162 163	181 186	359 361	394 406	180 179

Table 90. Little tunny from the Northwestern Pacific. Ragay Gulf, Bicol Peninsula, Luzon, Philippines*

290 300 302 321 321	81 84 85 90 92	92 97 94 100 100	184 184 186 198 197	195 202 203 218 222	91 96 96 100 105	328 331 335 337 337	9 4 4 9 5 9 9 9 9 9	101 105 105 105 107	202 203 202 206 205	228 224 223 231 225	103 104 108 108 107
322 323 327 328 328	91 93 92 93	100 102 99 100	198 196 200 202 193	221 222 223 224 222	102 100 108 104 104	503 531 543 544 546	136 143 150 149 183	144 167 168 -67 171	285 314 317 325 333	331 348 358 364 360	154 157 167 166 171

^{*}From the Philippine Bureau of Fisheries

Table 90 Little tunny from the Northwestern Facilic. Ragmy Gulf, Bicol Peninsula, Luzon, Philippines (Continued)

Total Length	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsel	Snout to Ins. Anal	Shout to Ins. Ventral	Total Length	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dormal	Snout to Ins. Anaj	Smout to Ins.
547 547 548 552 553	148 152 151 157 152	164 171 175 169 169	323 317 328 330 326	363 365 357 375 359	168 168 158 173 173	567 568 569 570 573	156 155 152 159 161	173 176 174 178 175	325 341 332 348 342	374 375 372 380 382	174 167 173 175 176
558 562 565	148 159 156	168 179 174	332 345 337	363 383 380	167 174 17 4	586 5 9 5	159 166	179 183	343 357	398 402	180 181

Table 91. Little tunny from the Northwestern Pacific: Southeastern Luzon, Philippines*

324 324 327 338 338 383 391 403 404 431	91 92 89 95 105 106 108 113 115 124	105 103 104 111 105 120 124 125 127 143	197 197 198 207 206 228 234 238 248 259	218 218 222 228 224 252 259 262 273 286	107 107 104 108 108 119 122 125 129 137	456 457 457 459 461 462 464 464 469 474	126 122 128 123 130 129 125 130 128 131	143 138 145 147 152 145 145 144 146 144	277 270 275 281 274 271 284 281 282 275	297 301 301 293 305 305 310 312 306	140 141 141 139 146 144 139 146 146
440	122	133	264	295	144	476	126	145	285	314	142
444	121	144	265	292	126	478	129	146	278	311	151
445	121	139	263	293	138	480	137	154	288	324	149
447	121	137	268	297	145	482	128	142	281	314	146
447	121	146	273	301	143	482	128	147	287	316	145
447 449 449 450 450	126 124 125 124 125	146 142 142 139 137	270 266 268 269	288 301 298 298	143 141 139	483 484 485 485 465	130 129 130 131 132	146 149 142 143 147	290 288 288 286 290	314 322 313 324 319	143 145 145 148 154
450	128	139	265	295	141	487	131	139	289	316	149
451	125	141	269	300	145	491	129	147	287	314	144
455	123	145	271	298	142	492	131	150	297	323	147
455	126	141	266	301	142	495	128	150	297	327	145
456	122	141	266	295	139	495	137	156	304	337	154

^{*}From the Philippine Bureau of Fisheries

Table 91. Little tunny from the Northwestern Pacific: Southeastern Luzon, Philippines (Continued)

Total Length	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins.	rotal Length	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	<	Snout to Ins. Ventral
496 498 498 409 499	133 140 142 130 139	152 157 156 150 160	294 298 302 292 302	316 340 343 320 331	154 152 157 144 158	507 508 509 514 514	137 140 142 142 146	158 155 159 164 161	297 308 306 310 308	334 339 330 336 339	156 155 160 161 157
500 501 505 507	134 130 145 136	145 150 165 157	302 295 312 306	325 327 345 328	149 144 159 155	518 523 534	143 144 147	162 165 167	314 308 319	345 343 351	161 162 163

Table 92. Little tunny from the Northwestern Pacific: South Sulu Sea, Philippines*

322	93	100	198	218	102	476	134	145	291	319	158
334	95	107	208	220	103	476	134	151	292	318	154
404	118	128	246	273	135	477	134	148	290	316	152
440	126	138	260	294	144	485	141	156	298	334	161
443	130	142	270	303	152	500	140	154	297	329	167
447 450 446 470 474	128 124 131 130 132	140 141 145 140 147	264 268 280 286 280	292 293 314 320 314 309	145 147 160 166 160	504 524 528 530 537	139 144 146 148 147	156 163 156 161 168	300 311 309 309 324	331 345 350 348 352	159 168 176 170 170

^{*}From the Philippine Bureau of Fisheries

Table 93. Dog-toothed tuna from the Western Equatorial Pacific. Western Marshalls

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins.	Snout to Ins. Ventral	Ins. Ventral to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Dorsal	Height Anal	Dismeter Iris	No. Gill Rakers	Sex	Month and Year	£ 80 C	Examiner
520 536 541 544 546	4.5 4.5 5.5 5.5 5.5 5.5	132 140 142 146 141	147 157 161 160 156	268 298 301 298 299	318 336 341 343 347	147 159 153 156 157		109 121 107 117 122	89 103 104 108 100	55 8 3 8 9 5 6 5 5	53 60 58 61 53	26 32 32 32 31		m f f m	*/47 */47 */47 */47 */47	Tr Tr Tr Tr	JCM JCM JCM JCM
556 561 565 571 578	5°55 5°56 6°6	147 145 150 150 152	161 165 166 164 172	313 315 310 318 325	354 359 355 365 372	107 163 165 170 170		124 134 122 120 125	97 100 101 112 108	59 56 60 34 60	57 60 58 64 64	31 33 32 35 33		m Î	*/47 */47 */47 */47	Tr Tr Tr Tr	JCM JCM JCM JCM
581 586 587 591 595	6.5.5 6.5 6.6	152 153 148 151 151	170 110 174 177	324 322 326 328 329	369 368 370 369 376	170 178 107 170 169		141 132 123 137 137	107 109 107 113 112	59 65 58 66 61	58 65 60 65 64	31 33 32 33 33		m	*/47 */47 */47 */47	Tr Tr Tr Tr	JCM JCM JCM JCM JCM
598 599 603 605 606	7 6.5 6.5 7	158 153 160 159 153	173 170 176 177 171	336 325 336 335 331	377 374 375 381 381	175 169 176 177 177		135 141 136 126 137	109 104 111 114 112	69 62 62 64 61	67 62 62 62 69	51 33 32 32 33		m	*/47 */47 */47 */47 */47	Tr Tr Tr Tr	JCM JCM JCM JCM
608 612 613 616 618	7 7 7 7.5 7	1 58 1 59	178	340 337 341	386 375 379	164 176 174 179 175		145	111 111 109 109 112	63 64 65 61 63	60 62 65 63 65	31 32 32 33		m m	*/47 */47 */47 \$/47	Tr Tr Tr Tr	JOM JOM JOM JOM
630 639 645 649 655	8.5 9	165 171 169	183 183 193 189 189	355	414 409	183 186 191			110 118 119	69 64 68 75 73	68 64 67 74 73	32 31 33 32 33		m m m	*/47 */47 */47 */49 */49	Ir Tr Tr Tr	JCM JCM JCM JCM

^{*} From July 19 to August 26

Table 93. Dog-toothed tuna from the Western Equatorial Pacific: Western Marshalls (Continued)

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins.	Snout to Ins. Ventral	Ins. Ventral to Ant. Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Dorsal	Height Anal	Diameter Irîs	No. Gill Rakers	Sex	Month and Year	Gear	Examiner
656 657 659 660 662	10 6,5 9	172 171 170 109 172	191 191 169 190 188	360 365 365 362 370	411 421 417 407 412	195 191 193 190 190		153 135 149 156 145	117 119 115 116 124	69 73 78 70 72	69 73 74 72 75	33 33 34 34 32		f f f	*/47 */47 */47 */47 */47	Tr Tr Tr Tr	JCM JCM JCM JCM
673 675 630 683 684	10.5 10.5 11 10.5	174 170	195 197 197 195 202	372 379 360 373 386	423 426 422 423 428	188 192 194 189 198		170 145 150 164	115 120 124 119 118	72 76 75 70 73	70 74 79 71 72	39 32 33 32 33		m f	*/47 */47 */47 */47 */47	Tr Tr Tr Tr	JCM JCM JCM JCM
689 694 698 704 710	10.5 11 10 12 12.5	188 177 186	196 207 196 204 203	382 386 381 395 395	427 445 435 472 444	193 208 200 207 209		158 158 145 165 162	126 124 135 132 126	73 70 78 74 77	69 7 2 7 7 7 6 7 5	32 33 33 34 33		f m f	*/47 */47 */47 */47 */47	Tr Tr Tr Tr	JCM JCM JCM
714 718 720 726 731	12.5 13 12 12 12	180 181 186 181 182	200 204 209 206 207	398 395 400 398 402	443 446 450 454 461	202 205		161 168 150 160	128 128 133 129 129	79 79 78 76 75	78 79 81 72 73	32 32 35 32 37		m m m	*/47 */47 */47 */47 */47	Tr Tr Tr Tr Tr	JCM JCM JCM JCM
7 58	15 14.5	192 192 197	222 215 220 221 227	427 424	472 476 483	222		167 171	129 141 132 138 143	70 85 85 83 79	73 79 85 79 78	33 33 33 33 36		f	*/47 */47 */47 */47 */47	Tr Tr Tr Tr	JCM JCM JCM JCM
735 739 791 823 852	11 15,8 19,5	178 208 217		375 449 459	431 519 520	197 219 242		168 192 202	142 117 138 150 158		86 63 84 92 90	44 34 41 43 43		f	*/47 */47 */47 */47 */47	Tr Tr Tr Tr	JCM JCM JCM JCM
972 1021 1079	29, 5 41.	248 263 377	306	850 566 611	627 671 632	27 E 301 321		212 231	178	93 100 107 113	102 105	39 39 44 43		f f f f	*/47 */47 */47 */47	Tr Tr Tr	JCM JCM JCM

Table 94. Dog-toothed tuna from the Western Equatorial Pacific Eastern Carolines

Total Length	Weight	Head Length	Snout to Ins.	Snout to Ins. 2nd Dorsal	Snout to Ins.	Shout to Ins.	Ins Ventral to Ant, Edge Vent	Greatest Body Depth	Length Pectoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No Gill Rakers	So.x	Wonth and Year	Gear	Examiner
700	11	182	204	390	427	197		156	120	71	Tl	31	2/10	f	2/48	Tr	ORS

Table 95. Dog-toothed tuna from the Northwestern Pacific: Japan

1026 38 1035 38	254 286 270 304	565 580	660 673	28 3 303						2≠10 1≠9		5/49 5/49	Tr BMS	S
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Table 96. Dog-toothed tuna from the Northwestern Pacific South Sulu Sea: Philippines*

								-
Total Length	Head Length	Snout to Ins. 1st Dorsel	Snout to Ins. 2nd Dorsal	Snout to Ins. Anal	Snout to Ins Ventral	Total	Head Length	Smout to Ins. 1st Dorsal
446	125	138	256	290	139	675	183	193
547	151	174	321	346	156	683	185	204
559	146	161	319	357	166	691	183	201
603	158	168	338	378	168	692	183	202
627	160	177	360	403	180	694	184	205
627	171	192	355	400	188	700	187	210
631	175	190	362	411	200	704	187	205
632	169	190	353	403	196	711	187	211
635	167	184	358	411	168	714	190	210
641	171	187	365	405	195	721	189	215
650	174	194	375	424	200	724	194	204
654	171	194	371	420	196	728	194	207
655	173	204	382	416	190	738	197	214
6 55	175	196	380	407	167	741	198	223
662	178	194	370	424	200	742	198	214

*From	the	Philippine	Burea	tu of	11	sheries

Total Length	Head Length	Snout to Ins. 1s Dorsal	Snout t Ins. 2n Dorsal	Snout t Ins An	Snout t Ins.
675	183	193	378	437	194
683	185	204	395	443	209
691	183	201	392	453	201
692	183	202	395	437	203
694	184	205	399	456	201
700	187	210	402	459	209
704	187	205	404	452	208
711	187	211	407	460	210
714	190	210	402	471	208
721	189	215	413	470	204
724 728 738 741 742	194 194 197 198	204 207 214 223 214	395 424 420 434 419	443 473 488 479 475	209 223 220 220 215

Table 96. Dog-toothed tuna from the Northwestern Pacific South Sulu Sea, Philippines (Continued)

Total Length	Heac Length	Snout to Inv. 1st Dames.	Shout to In . 174 Desert	Sr. C. E. Anal	Smous to In Ventral	2), 20, 34 42, 63 43, 64 44, 6	Head Length	Spiral for the Double of the Control	Scout to In., in. Destreed	Storie Jino Angli	Shout to Into
744	200	221	433	490	224	850	234	259	484	575	260
753	205	229	438	485	228	851	232	260	485	565	249
755	200	220	430	496	221	877	234	266	545	570	253
758	203	218	430	487	229	881	225	248	481	565	245
760	200	226	427	492	220	902	245	273	523	600	273
764	207	233	452	512	232	915	241	271	52 5	607	266
788	218	239	450	513	244	917	255	280	540	597	284
791	219	247	452	528	244	920	248	272	544	609	280
796	211	237	467	529	259	954	250	280	545	609	273
798	224	247	460	527	243	937	253	291	550	616	270
822	224	245	462	527	247	1015	265	309	598	663	305
823	214	251	476	522	240	1033	281	325	609	684	320
836	222	251	479	539	249	1054	287	322	624	685	325

Table 97. Double-lined mackeral from the Western Equatorial Pacific: Western Marshalls

Tatal Length	West and the	Head Length	Smout a Ins. Ist Dersal	Snout to Inc. In Dorsal	Sport to Inc.	Shout to Inc.	Ant. Flee Vent.	Greathest Body Depth	Length Pectoral	Haight ind Dorsal	Height Anal	Di-meier iris	N . Gill Rekers	¥5	Morth and Year	2 F 2 T	Examiner
408 411 417 425 427	1.5 1.5 1.5 2	91 88 89 89 92	125 120 122 124 125	223 225 228 228 232	243 247 250 254 255	109 108 107 110		75 80 82 82 82	55 51 51 55 58	37 36 35 39 37	37 34 35 38 38	23 18 18 23 22		f f f m m	*/47 */47 */47 */47 */47		JCM JCM JCM JCM
428 433 543 453 458	1.5 1.8 3.5 2	92 92 115 101 99	161 135	235 236 299 249 247	256 265 329 273 275	108 117 144 120 123		86 85 106 84 86	61 60 73 60 62	37 38 49 37 37	36 36 48 37 38	21 24 25 24 24		m m f m m	*/47 */47 */47 */47 */47		JCM JCM JCM JCM

^{*}From July 19 to August 26

Table 97. Double-lined mackeral from the Western Equatorial Pacific: Western Marshalls (Continued)

Total Length	Weight	Head Length	Snout to Ins. 1st Dersal	to Dors	h1	Snout to Ins. Ventral	Ins. Ventrel to Ant. Edge Vent	test Bod th	Length Factoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Se.7.	Month and Year	aren.	Brandour
467 482 485 545 580		101 104 104 113 124	140 144 147 160 174	256 261 262 300 318	280 290 301 334 353	120 126 131 145 154		86 89 90 110 118	67 63 65 64 71	40 43 43 50 51	40 41 44 51 54	25 24 23 24 26		m f f f	*/47 */47 */47 */47 */47		JCM JCM JCM JCM

Table 98. Frigate mackeral from the North Central Pacific Hawaiian Islands

330 336 339 339 342	1.3 1.5	93 93 95	108 107 110	212	230 228 229	101 106 103 102 104		76 76 75 84 77	49 50 49 50 49	23 21 24 23 23	21 21 22 23 20	16 17 17	.,	11/49 9/49 11/49 11/49 9/49	Pl Tr Pl Pl Tr	BMS KY BMS BMS KY
342 347 353 355 355	1.6 1.8 1.5	91 95 99	110 107 109 114 119	217 221 220	240 239	103 106	ļ	80 84 88 77 89	50 50 50 54 49	23 22 22 23	21 21 20 23 20	17 16 16 18 16	, i	11/49 11/49 5/49 9/49 5/49	Pl Pl Pl Tr Pl	BMS BMS KY KY KY
357 357 366 393	1.6 2.5	99 100	112 115 115 122	221 228	243 251	109 111 115 125		76 80 96 100	51 53 53 57	24 24 22 22	21 23 22 23	18 17 17	10/31 10/33	9/49 9/49 5/49 8/48	Tr Tr Pl	KY KY KY HHE

Table 99. Frigate mackeral from the Northwestern Pacific: Japan

306	.98	79	93	199	214	90	65	39	15	14	15	12/35		5/49	P1	BMS
322	1.3	84	96	205	230	96	75	42	15	15	18	10/34		5 /49	Pl	BMS
324	1.3	85	101	211	228	97	77	43	17	16	17	11/34	m	5/49	Pl	BMS
329	1.4	85	100	208	231	99	77	41	16	14	16	12/32	m	5/49	Pl	BMS
330	1.4	88	104	212	232	99	77	43	16	15	17	12/35	f	5/49	Pl	BMS
				1												

^{*}From July 19 to August 26

Table 99. Frigate mackeral from the Northwestern Pacific: Japan (Continued)

Total Length	Weight	Head Length	Snout to Ins. 1st Dorsal	Snout to Ins. 2nd Dorsal	Snout to Ins.	0	Ins. Ventral to Ant. Edge Vent	0) (2)	Length Pectoral	Height 2nd Dorsal	Height Anal	Diameter Iris	No. Gill Rakers	Sex	Month and Year	Gear	Examiner
331 331 338 338 344		87 90 91	101 102 106 106 105	219 218	237	102 94 100 104 102		78 79 81 84 81	42 45 45 43 43	16 16 16 17 21	16 16 15 .7 20	17 18 16 16	10/34 12/32 11/33 10/32	m m f	5/49 5/49 5/49 5/49 5/49	Pl Pl Pl Pl Pl	BMS BMS BMS BMS BMS
371 375 388 399 400	2.9 2.5 3.1	109 107 110	123					96 105 101 105 99	57 55 57 59 59	21 30 23 27 29	21 29 23 27 26	19 16 19 17 16	11/30	f m	5/49 5/49 5/49 5/49 5/49	Pl	BMS BMS BMS BMS BMS
407 410 412 433 441	3.09	113 110 115	130 130 138	257 262 268	274 285 275 295 300	129 121		107 104 105 112 112	59 58 61 60 66	29	22 23 29 29 28	19 19 17 17	10/30 10/31	f m	5/49 5/49 5/49 5/49	Pl Pl	BMS BMS BMS BMS BMS
446 456 458 470	4.3).24	142	289 293	301 312	135 132 136 139		117 118 117 120	68	32 33 32 32	31	19 19 20 21	10≠29 11≠31		5/49 5/49 5/49 5/49	Pl	BMS BMS BMS BMS



